HEALTH IN NORTH-WEST CHESHIRE

WITH STATISTICS,

Presented to the Rural and Urban District Authorities

AS THE

ANNUAL REPORT

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While such official reports, like the official reports of the Central Department, must contain the prescribed statistics and routine tabulations, they provide ample opportunity and scope for the medical officer to guide his authority and the public in the appropriate directions of advance.

(*Newman*).

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To use too many circumstances, ere we come to the matter is wearisome; to use none at all is blunt.—Bacon.

LITTLE, if any, objection can be offered if a portion of the preface of a seventeenth century book be borrowed for the purpose of a twentieth century health report, although its writer could never have dreamed of the base use which it would serve. "As it is usuall in Countrie, and homely houses, when guests come upon the suddaine, to tell them at the porch beforehand, what they shall find within. So I heere at thy entrance (Ingenious Reader) tell thee there is not so good provision for thy entertainment, as I could wish." It is a Survey Report, in which an effort is made, in the words of the Ministry's Circular, to deal comprehensively with—

(*a*) The measure of progress made in the area during the preceding five years in the improvement of the public health.

(*b*) The extent and character of the changes made during that period in the public health services of the area (*e.g.*, housing, water supply, sewerage, scavenging or refuse disposal, food inspection, or other services affecting the environment of the inhabitants; and maternity and child welfare schemes, schemes for the treatment of tuberculosis and venereal diseases, provision of isolation hospitals, or other services directed to the prevention or cure of disease in individuals).

(*c*) Any further action of importance in the organization or development of public health services contemplated by the local authority or considered desirable by the Medical Officer of Health.

Then the circular proceeds to state the minimum information and the order in which it should be supplied. Reports of former years contained brief paragraphs on health matters, to which public attention had been drawn by the press, and this custom has again been followed.

CANCER.—This disease pursues its ruthless course, but in 1925, the work of two observers, who were investigating its cause, was published and attracted world-wide attention. Certain diseases behave in such a way that although organisms have never been demonstrated as their causes, nevertheless it is inferred that they must be due to organisms. Research workers " have been trying to find means of seeing, growing, isolating, and manipulating these organisms, of whose existence we have had till now only indirect proof." In a certain breed of fowls, a rapidly fatal malignant tumour grows,and it had been shown that the causal agent of the tumour could pass through filters which would hold back ordinary bacteria. The agent was a filter-passing virus in the opinion of the original investigator. The Report of the Medical Research Council states that " Dr. Gye has now provided experimental proof that this opinion is true."

> " In the first place he has shown that the agent in question can be shifted in fluids containing it by very rapid rotary movement—and is therefore corpuscular ; in the second place he devised means for the first time to cultivate the organism artificially, and so to use it in isolation for experimental work. He found evidence that the cultivated and isolated germ could not alone produce a new tumour, but only in the presence of an equally essential second factor, a a non-corpuscular and therefore a non-living and soluble chemical substance, which could be obtained from the substance of the previous tumour. The ultra-microbe, together with the chemical factor (specific factor) regularly gave a new malignant tumour. The microbe itself is quite invisible by ordinary microscopic methods. Mr. Barnard however, devised special means for demonstrating its

presence, and for gaining some first approximations to its description by using ultra-violet light."

The comment in the Report is " It need hardly be pointed out that the establishment of a definitely parasitic causation of malignant disease brings new hope to the prospect of gaining further knowledge."

In Liverpool, there has been continued research into Professor Blair Bell's method of obtaining destruction of malignant cells, and therefore curative action, by salts of lead. Blair Bell suggested that trades in which lead poisoning occurs had a lessened mortality from cancer, but this is said not to be borne out by statistics published in " An Investigation into the statistics of Cancer in different trades and professions," issued by the Medical Research Council. Notwithstanding the occasional presence of malignant disease in occupations subject to plumbism it does not follow that the use of certain salts of lead may not combat cancer, or specific types of cancerous growth, as determined by Blair Bell in his experimental work.

On the association between foods and cancer, this authoritative investigation states—

> "From time to time statements have been made and theories have been propounded that certain foods, or fruits, or constituents of these, predisposed or were unfavourable to the development of cancer, and similar assertions have been made about the possibility of certain drugs and similar substances producing liability or relative immunity to the disease. Such views are usually supported by data wholly inadequate to bear accurate investigation, and after a considerable vogue for a varying period, have been more or less completely discredited."

From the memorandum published by the Ministry in 1923, it may be gathered that—1, no proof exists that hereditary predisposition is of practical importance in the human subject ; 2, there are no " Cancer Houses " or " Cancer Districts " ; 3, there is evidence neither of infection nor contagion ; 4, scientific basis for the belief that any specific article of food produces cancer, or prevents its appearance, is lacking.

Local Government.

The "First Report of the Royal Commission on Local Government" was issued during 1925. It deals with the constitution and extension of County Boroughs—a subject full of interest in an area adjacent to two County Boroughs. When the County Borough of Birkenhead, in 1920, sought powers to absorb districts close to its boundaries a Joint Committee of the two Houses of Parliament, which dealt with the Bill, expressed the opinion that "no Provisional Order for Borough Extension should be brought before Parliament for confirmation, which has not previously received the substantial support of the ratepayers in the areas proposed to be incorporated." In its conclusions and recommendations the Royal Commission reports.

> "There was general agreement among the witnesses who appeared before us that the wishes of the inhabitants of areas which County Borough Councils propose to add to the Boroughs cannot be regarded as conclusive, whether they are in favour of, or in opposition to, the proposals. When the wishes of the inhabitants have been fairly ascertained, we think that although, as has been stated, they cannot be regarded as conclusive, the weight to be attached to them is so great that they ought not to be overruled unless it is shown that there are considerations of public advantage which in the opinion of the proper authorities are more weighty and of greater importance than the objections of the inhabitants.
>
> Committees of Parliament have in the past come in some cases to the conclusion, after hearing the whole of the circumstances, that no sufficient grounds have been shown for over-ruling the wishes of the inhabitants of the areas affected. In other cases, committees of Parliament have

confirmed proposals to which strong objection has been taken by a large majority of the inhabitants of the area sought to be annexed, and evidence has been submitted to us to the effect that the result of the extension has been beneficial even where it has been authorized in face of the objection of the inhabitants."

Quotation from " Arguments as to Provision of Sewerage and other Sanitary Services " may also be found useful as well as interesting :—

" We have come to the conclusion that the authorities to whom proposals for the extension of County Boroughs are referred, should give weight to arguments relating to the provision of sewerage, and of other sanitary services, as tending to show that any proposal to extend the boundaries of a County Borough is desirable, in so far as they are satisfied that there would be a substantial improvement in sanitary administration (by which we mean, in application to a proposed added area, an improvement suited to the requirements of that area) which it would not be reasonable to expect to attain equally well by means other than the extension of the boundaries of the County Borough, such as, for example, co-operation for the purpose of the provision of sewerage or other sanitary services between any of the local authorities concerned with the proposal of extension."

On the arguments as to Trading Services :—

" While it would not be consistent with our general conclusion on the question of the admission of arguments to recommend that those relating to these services should be excluded from the purview of the authorities to whom proposals are referred, we have come to the conclusion that, unless the promoters can show to the satisfaction of such authorities that the circumstances in the area affected are of a special kind, the fact that they supply gas, water, electricity, or means of transport in a proposed added area should not be considered as an argument of serious impor-

tance in the determination of the question whether the proposal to extend the boundaries of the Borough is desirable."

On the arguments as to Town Planning :—

"We think that the fact that a town planning scheme extends both over the area of the County Borough and over the whole or part of any proposed added area should not be considered as being of serious importance in the determination of the question whether the proposal to extend the boundaries of the Borough is desirable."

Poor Law.—Poor Law, which has survived the threats and outlived the term of innumerable governments, is at last to be led to execution. Its demise will alter the whole tenor of local administration. The arguments promoted by the opponents of change against the phœnix (if there can be arguments against a myth) which will arise from the poor law ashes, appear to be based on the ignorance of the new foster parents, who, although experienced in other directions, have never up to the present time shown any interest in the poor bird ; the costliness of the new incubator is unknown—the present system may be costly and the new may be colossal. There will be a reduction in the number of local elections and local administrative bodies. Prevention and treatment of ill-health, public assistance, unemployment benefit are all sought to be brought under a unified service. Boards of Guardians are abolished—County Councils and County Borough Councils assume their duties. After a few years of experience of the great reform, which the measure contemplates, will there be a hark back to the administration of to-day, which, at its worst irks but gently those who fall under it ?

On October 31st, 1925, 216,969 persons were receiving institutional relief in England and Wales, and 1,053,210 domiciliary relief. On the corresponding date in 1924, the numbers were 211,802 and 834,948.

Legislation.

A new Housing Act came into operation in 1925 to consolidate the enactments relating to the Housing of the Working Classes in England and Wales, and also a Town Planning Act with the object of consolidating Town Planning Acts.

The Milk and Dairies Consolidation Act, 1915, came into operation.

The Public Health Act, 1925, is an Act to amend the Public Health Acts, 1875-1907, and the Baths and Washhouses Acts, 1846-1899, in respect of matters for which provision is commonly made in local acts and for other purposes relating to the public health. There is a section in this act which confers powers whereby an infectious person suffering from pulmonary tuberculosis can be conveyed to hospital and detained therein, until habits are acquired which will render him less harmful to his associates.

But Pooles marre all, and make the Garden unwholesome, and full of Flies and Frogs.—Bacon.

Mosquitoes and Biting Flies.—Wirral, in common with other parts of England, from time to time, suffers annoyance from the prevalence of biting insects, and complaints of "unequal contests with a mosquito" are addressed to the Medical Officer. Gnats and Mosquitoes are abundant, breeding in the old marl pits and stagnant ditches. More attention than usual has been directed to the nuisance owing to the asserted occurrence of a death in which an insect bite may have been a contributory cause. So far as can be ascertained, no malaria has ever been reported to have been contracted in the Peninsula, although malaria-infected discharged soldiers were numerous a few years ago, and foreign ships with infected Lascars probably arrive at the Port from time to time. The climatic conditions

may account for this immunity from malaria. The British Museum authorities have issued a pamphlet on " British Mosquitoes and their control," so it may not be inappropriate to quote from it, that there are 26 different species of mosquito which occur in England ; most of them have different habits and modes of life ; some do not bite human beings ; some bite mainly in houses, others only in the open air ; some are troublesome in the spring, others in the autumn ; some are prevalent only within a short distance from the water in which they breed, others spread by flight over a wide area ; some utilise as breeding places only particular kinds of water, others deposit their eggs on water of any kind, others, again, scatter them on dry ground ; some produce only one brood of adult insects each year, others two, others several ; some pass the winter in the egg stage, others in the larval, others in the adult stage.

It is only the female mosquito which bites.

Individuals which belong to the group of malarial carriers are distinguished by the position which they take up when at rest " the whole body extends in a straight line at an angle with the surface on which the insect is resting, while other mosquitoes have a hump-backed appearance." There are three species in this group and one which has dark spots on the wings is common in Wirral. Its breeding places are ponds, streams and ditches, with brackish water. Only the females survive the winter. They hibernate in stables and cowhouses. They bite during the night or at dusk, and generally indoors. There is a much larger biting mosquito which also has dark spots on the wings, but it has white rings on its legs so it is readily distinguishable from the malaria species. Two years ago, Wirral had an abundant visitation of this large form, which breeds in water polluted by sewage or farm yard manure. " The insects bite both men and domestic animals, indoors as well as out, chiefly at dusk. The bite is usually painful and often raises large swellings." The common gnat was a nuisance three years ago in Prenton, breeding in the ponds within the woods. " The breeding places are very various, almost any stagnant water serving for this purpose, but those waters seem

often to be preferred which are contaminated with sewage or putrefying organic matter. The larvae are very frequently found in water butts, sometimes in roof-gutters or cisterns, or in catch-pits of street gutters." The females hibernate in poultry houses, cellars, etc. " Although very often present in large numbers in houses, it is comparatively seldom to be regarded as a pest of man ; it would seem to require particular climatic conditions, such as warm, calm weather, before it will attempt to bite, but at certain seasons and places it can undoubtedly prove troublesome, especially in well-warmed rooms in mild weather, either in late autumn or in early spring. When an attack is made it is usually at late dusk, during the night or in the morning twilight, and most frequently indoors."

Under the heading of " Measures for Control and Protection." the pamphlet mentions :—

1.—Measures against the adult insects. Catching and killing ; vacuum cleaning machine fumigation with sulphur ; spraying ; lime washing.

2.—Measures against larvae and breeding places. Use of larvicides and disinfectants ; engineering methods.

3.—Measures for protection against mosquito bites. Essential oils, *e.g.*, citronella, thyme, verbena, lavender, cloves, cinnamon.

For the swelling and irritation produced by bites, use weak ammonia, washing soda or iodine in glycerine.

Water is necessary for the breeding places of most of the mosquitoes, but in order to avoid them few would go so far as to agree with the author of this quotation.—

> " The great object of a wise man should be to live on a gravelly hill, without so much as a duck pond within ten miles of him, eschewing cisterns and water-butts, and taking care that there be no gravel pits for lodging the rain."

North-West Cheshire Combined District.

Natural and Social Conditions of the Area.

AREA.—The area is 48,966 acres or practically 76.5 square miles.

POPULATION.—The 1921 Census enumerated a population of 79,183 persons; 37,483 males, 41,700 females. At 30th June, 1925, the population is estimated to have been 87,417, an increase of 8,234 persons. An estimate of the population, based on the building statistics, gives a population of 93,811 at the present time.

PHYSICAL FEATURES AND GENERAL CHARACTER OF THE AREA.—The North-West Cheshire Combined District is the greater part of the old Hundred of Wirral, occupying the peninsula which stretches from the main bulk of the County of Chester to the North and West between the estuaries of the Mersey and the Dee. Not inaptly it has been described as the spout of the teapot, with Cheshire as the pot; and as part of the western gap between the Welsh upland and the Pennine upland, which allows access to the Midland Plain in the interior of England. The plateau, which comprises its major portion, presents two parallel ridges of higher ground running almost directly North and South with hills from 200 to 360 feet in height. There are off-shoots from the main ridges which bound sheltered fertile valleys. On the ridges,

the townships which lay claim to ancient origin, are built ; they are British and date from times anterior to Anglian or Norse invasion.

Fenced, hedged, enclosed, highly cultivated, little remains of the old heath-clad, gorse-covered, land and what exists is being visibly devoured by dwellings, while committees sit and deliberate as to its fate. The old tendency of the townships to cluster around the rocky outcrops and their parish churches disappears and the houses invade the clay bottoms by long ribbon-like tentacles. The surface of the Peninsula is covered with boulder-clay, left by the great glacier which filled the basin of the Irish Sea, pushing South and East, carrying boulders of volcanic rock detached from Southern Scotland and the English Lake District. At Prenton, Moreton, New Ferry, Ellesmere Port and Neston, the clay is dug to make bricks. The practice of marling the land, now abandoned, consisted in digging out the clay for agricultural purposes, and accounts for the pits which are so numerous in Wirral fields. In some places the clay is tough and red in others it is more sandy and here and there patches of sand and gravel occur both above and under it. As the fat under the skin fills in the hollows of the skeleton, so the boulder clay fills in the hollows and inequalities of the underlying framework of new red sandstone. In a boring at Hooton, the clay was found at 128 feet below sea level, but there are other places as Grange Hill and Thurstaston where " nature appears worn to the bone," and the rock presents itself through the clay blanket. New red sandstone forms the foundation of England from the mouth of the Tees to that of the Exe and sends a projecting spur into Cheshire and along the Mersey. Two main divisions of the sandstone are recognisable ; both are coloured by peroxide of iron, but the upper is more clayey and less resistant to weather while the lower and older division is more sandy. The lower division is known to be not less than 2,847 feet in thickness, and its chief economic value lies in its storage capacity for good water. The wells at Grange Hill, Newton, Hooton, Prenton, Neston and Bromborough are supplied from it. In the Neston area it is quarried for building purposes. The upper division

supplies the Storeton freestone, which was used to build the Town Hall Birkenhead, the Custom House, Lime Street Station, St. George's Church and the Philharmonic Hall, Liverpool. In Roman and Saxon times, it was quarried as it is to-day. Clay for bricks, stone and sand for building, sand for moulding, refractory sand for the metal industries of South Wales, sand used in bottle making are worked in Wirral, but of greater importance is the coal mined in the two square miles of territory along the South-west coast bordering the Dee. Shafts of disused colleries, first sunk in 1757, occur along the shore, but to the landward side all workings are shut off by sandstone so that the coal is " got " from beneath the flats of the Estuary. Geologists state that the Middle Coal Measures are represented in the Wirral pit, and that its seams are co-ordinated with those of Flintshire colleries. Hence arises the allurement of the plan, again mooted, to canalise the Dee and tap the coal measures below the estuarine mud. With the barren results of the Heswall boring of a few years ago in mind, for after 2,374 feet of sandstone, the Middle-Lower Coal Measures were pierced to a depth of 3,362 feet without finding workable coal, it may be that the estuarine collieries are a dream. Old Andrew Jarrenton, whose book is to be obtained from the Mayer Library, dreamed of canalising the Dee and reclaiming the land for agricultural purposes as long ago as 1677. The modest title of Andrew's scheme may be worth reading. " England's Improvement by Sea and Land to outdo the Dutch without Fighting, to Pay Debts without moneys, to set at work all the Poor of England with the Growth of our own Lands ; to Prevent Unnecessary Suits in Law, with the Benefit of a Voluntary Register. Directions where vast quantities of Timber are to be had for the Building of Ships. With the Advantage of Making the Great Rivers of England navigable. Rules to prevent Fires in London, and other Great Cities. With Directions how the Several Companies of Handicraftsmen in London may always have Cheap Bread and Drink." Jarrenton was patriotic, his schemes were " in order to the making us every way great, beyond any Nation in the world," and his times were like our own. " People confess they are sick, trade is in a consumption,

the whole nation languishes, and the physick prescribed is very proper and good, but some like not the season, and fain would put it off (like repentance) still a little longer, until at length it be too late. Others fancy not the doctor, and so resolve not to like it because his advice." Dream or reality, fantasy or engineering feat, Wirral Local Authorities meet North Wales Representatives to deliberate on schemes which, if carried out, would alter, not only the physical features and geography, but the whole economic character of the Peninsula. Already work is in progress which will link the Peninsula with Lancashire by the Tunnel beneath the Mersey, and will ultimately induce a greater community of interest with Liverpool than exists even at present. This reference to the general character of the area would be incomplete without a brief commentary on the Northern Shore with its fringe of sand dunes through which the sea broke, thus compelling the erection of the Leasowe and Wallasey embankment as an alternative to a rapid and wide spread erosion of the coast. The dune belt failed to protect the land, and the erection of the embankment was begun in 1829. From the 50 feet contour line to the embankment, there are deposits of peat, submerged forests, and alluvium overlying the boulder clay. Evidence derived from geology establishes the propositions that at least two old land-surfaces are represented and that " at the end of the glacial period the land must have stood at least 50-100 feet higher above the sea-level than at present." It is authentic also that " in early post-glacial times, many of the districts along the Wirral coast, now submerged under the Mersey and Dee Estuaries, consisted of wooded slopes and valleys; while the land probably extended much farther seaward than at the present time. Since the glacial period, there has been a gradual subsidence of the area." Recognition of these geological conditions is necessary if an understanding is to be obtained of the surroundings and state of caravan sites in Lower Moreton which is dealt with at page 167 in this report.

Social Conditions.—The 1921 Census showed a total of 79,183 persons in the North-west Cheshire Combined Area, and 18,381 were below the age of twelve years. Enquiry into the

avocations of the 60,802 persons who were over twelve years of age at the time of the Census (27,957 males, 32,845 females), revealed that 34,169 were described as occupied and 26,633 were unoccupied or retired. If an examination be made of the population divided according to sex, 23,800 males and 10,369 females were occupied ; 4,157 males were unoccupied or retired and 22,476 females. A very few decades back the area was predominantly agricultural, but to-day the industrial belt along the Mersey tends more and more in its expansion to alter and influence the neighbouring zone so that agriculture recedes to the centre of the Peninsula. Ellesmere Port, with its great works for galvanising corrugated iron sheets, has 266 persons per 1,000 occupied in the metal industry. At Bromborough and Lower Bebington, a concentration of chemical workers and makers of paints, oils, soaps, perfumes and associated trades, is encountered. Almost the only miners in the area are at Neston where they number 256. In the whole of Cheshire there are 285 fishermen, of whom 151 are in the Wirral Peninsula. 5,721 persons are employed in personal service and as the Census volume states " the proportion of indoor domestic servants per 1,000 of the population is of much importance as an index to social conditions." Hoylake and West Kirby 89, Wirral 75, Bromborough 59, Neston 58, Higher Bebington 32, Lower Bebington 17, Ellesmere Port 11, each per 1,000 indicate the respective nature of the districts judged by this criterion. The workers in commerce and finance are 3,473, in the professions 1,798, in clerical occupations 2,775, in transport services 2,894, in building, bricklaying, painting and decorating, woodworking 2,497.

North West Cheshire Combined (Public Health) District.

Occupation.	Males.	Females.
Total Population	37,483	41,700
Aged 0-11	9,526	8,855
Aged 12 and upwards	27,957	32,845
I. Fishermen	151	0
II. Agricultural Occupations	2,769	197
III. Mining and Quarrying Occupations	335	0
IV. Makers of Coke, Lime, Cement, etc.	65	5
V. Makers of Bricks, Pottery, Glass	36	27
VI. Workers, in Chemicals, Paints, etc.	661	188
VII. Metal Workers	2,775	40
VIII. Workers in Precious Metals	3	1
IX. Electrical Apparatus Makers, Fitters, etc. ...	304	136
X. Makers of Watches, etc.	34	1
XI. Workers in Skins ; Leather Goods Makers ...	23	3
XII. Textile Workers	23	28
XIII. Makers of Textile Goods and Articles of Dress	210	405
XIV. Makers of Foods, Drinks and Tobacco ...	446	172
XV. Workers in Wood, etc.	1,049	25
XVI. Paper Workers ; Printers, etc.	232	242
XVII. Builders, Bricklayers, etc.	1,094	3
XVIII. Painters and Decorators	325	16
XIX. Workers in other Materials	7	0
XX. Workers in Mixed and Undefined Materials ...	215	13
XXI. Persons in Gas, Water, Electricity Supply ...	70	0
XXII. Transport Workers	2,765	129
XXIII. Commercial and Financial Occupations ...	2,555	918
XXIV. Public Administration and Defence	372	99
XXV. Professional Occupations	855	943
XXVI. Persons Employed in Entertainments, etc. ...	137	44
XXVII. Persons Employed in Personal Service ...	459	5,262
XXVIII. Clerks, Draughtsmen, Typists, etc.	1,731	1,044
XXIX. Warehousemen, etc.	391	335
XXX. Stationary Engine Drivers, etc.	453	0
XXXI. All other occupations	3,249	100
Total Occupied	23,800	10,369
XXXII. Unoccupied and Retired	4,157	22,476
Total Occupied and Unoccupied	27,957	32,845

POPULATION.—The natural increase (that is the excess of births over deaths) of the population is shown in the following table (1921-25).

Year.	Population.	Natural Increase per 1,000 population.
1921	79,088	11.6
1922	79,873	8.5
1923	81,572	9.9
1924	84,777	8.1
1925	87,417	7.3

DENSITY.—There are approximately 1.7 persons per acre. The whole area is in a state of transition, advancing rapidly in urbanisation and the three sounds of increase in medieval times and rural areas, viz., " the lowing of a cow in milk, the din of a smithy, the swish of a plough " are silent.

2. Extracts from Vital Statistics, 1925.

Births.

The births numbered 1,552 : males 823, females 729 ; 1,500 were registered as legitimate, and 52 as illegitimate. The birth rate was 17.7 per 1,000 of the population.

The highest rates were recorded in Ellesmere Port and Neston, and the lowest in Hoylake and West Kirby, and Bebington and Bromborough.

For purposes of comparison the Registrar General's figures are quoted.

	Birth Rate per 1,000 Total Population.
England and Wales	18.3
105 County Boroughs and Great Towns including London	18.8
157 Smaller Towns (1921 Census adjusted populations 20,000—50,000)	18.3
London	18.0

The birth rate was the lowest recorded except during the war years 1917-1919.

In Wirral Rural, Hoylake and West Kirby, Bebington and Bromborough, the birth rates were below those for England and Wales.

Deaths.

911 deaths were recorded ; 458 males and 453 females.

The death rate was 10.4 per 1,000 of the population. It was lowest in Bebington and Bromborough and highest in Neston and Parkgate, and Ellesmere Port.

The Registrar General's figures are quoted :—

ANNUAL DEATH RATE PER 1,000 POPULATION.

	All causes.	Enteric Fever.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Influenza.	Violence.
England and Wales ...	12.2	0.01	0.00	0.13	0.03	0.15	0.07	0.32	0.47
105 County Boroughs and Great Towns including London	12.2	0.01	0.00	0.17	0.03	0.18	0.09	0.30	0.43
157 Smaller Towns (1921 adjusted Populations 20.000—50,000) ...	11.2	0.01	0.00	0.15	0.02	0.14	0.06	0.31	0.38
London	11.7	0.01	0.00	0.08	0.02	0.19	0.11	0.23	0.46

The death rate in England and Wales was the same as in 1924, and .6 per 1,000 above that recorded in 1923.

Crude death rates are " insufficient as a measure of relative vitality of communities," so the Registrar General has supplied a standardising factor for correcting the death rate in the Urban and Rural Districts with a population of 10,000 or over at the last census. By the use of the factor, the crude death rates are modified to show " what they would have been had the local populations been constituted as to age and sex like the total population of England and Wales in 1901." " Looking upon mortality as a tax, the standardised death rate measures the tax, and the crude death rate the yield." Standardising factors have been supplied for the Rural Area and the Urban Districts except Neston and Parkgate.

ANNUAL DEATH RATE PER 1,000 POPULATION.

	All Causes.	Enteric Fever.	Smallpox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Influenza.	Violence.
North West Cheshire Combined District	10.4	0.00	0.00	0.11	0.03	0.24	0.03	0,17	0.38

Causes of Death.

A new "Short list of Causes of Death" has been adopted by the Registrar General, after agreement with the Ministry of Health, and the deaths in the Combined District arranged in this list are shown in the subjoined Table.

All Causes.		M.	F.	Total
1.	Enteric Fever	0	0	0
2.	Small Pox	0	0	0
3.	Measles	6	4	10
4.	Scarlet Fever	1	2	3
5.	Whooping Cough	12	9	21
6.	Diphtheria	0	3	3
7.	Influenza	7	8	15
8.	Encephalitis Lethargica	0	2	2
9.	Meningococcal Meningitis	1	0	1
10.	Tuberculosis of Respiratory System	29	30	59
11.	Other Tuberculous Disease	7	11	18
12.	Cancer, Malignant Disease	43	53	96
13.	Rheumatic Fever	1	2	3
14.	Diabetes	4	5	9
15.	Cerebral Haemorrhage, &c.	28	29	57
16.	Heart Disease	56	70	126
17.	Arterio Sclerosis	32	29	61
18.	Bronchitis	22	29	51
19.	Pneumonia (All forms)	38	27	65
20.	Other respiratory Diseases	9	6	15
21.	Ulcer of the Stomach or Duodenum	6	2	8
22.	Diarrhœa, &c. (under 2 years)	8	6	14
23.	Appendicitis and Typhlitis	5	1	6
24.	Cirrhosis of Liver	2	1	3
25.	Acute and Chronic Nephritis	9	10	19
26.	Puerperal Sepsis	0	4	4
27.	Other Accidents and Diseases of Pregnancy and Parturition	0	7	7
28.	Congenital Debility and Malformation, Premature Birth	31	14	45
29.	Suicide	5	2	7
30.	Other Deaths from Violence	23	11	34
31.	Other Defined Diseases	73	75	148
32.	Causes Ill-defined or Unknown	0	1	1
	Totals - -	458	453	911

Number of women dying in or in consequence of—

Childbirth (from Sepsis) 4
,, (from other causes) 7

The percentage of deaths of persons dying in Public Institutions was 30.7.

Inquest cases constituted 8.3% of the total deaths; 1.3% of the deaths were uncertified.

Registrar General's Table.

PERCENTAGE OF TOTAL DEATHS.

	Causes of Death Certified by Registered Medical Practioners	Inquest Cases.	Uncertified causes of Death.
England and Wales	92.1	6.9	1.0
105 County Boroughs and Great Towns including London ...	92.1	7.3	0.6
157 Smaller Towns (1921 adjusted populations 20,000—50,000) ...	93.0	5.9	1.1
London	91.1	8.9	0.0

The total deaths of infants under one year of age were legitimate 101, illegitimate 12—Total 113.

The Infantile Mortality Rate for all infants was 72.8 per 1,000 births; for legitimate infants it was 67.3 and for illegitimate 230 per 1,000 births.

The Registrar General's Table is as follows :—

	Rate per 1,000 Births. Total Deaths under one year.
England and Wales	75
105 County Boroughs and Great Towns, including London	79
157 Smaller Towns (1921 adjusted populations 20,000—50,000)	74
London	67

Infantile mortality was 6 per 1,000 registered births above that recorded in 1923, and was the same as in 1924 in England and Wales.

The infantile mortality figure is accepted as an index of the health conditions of a community. In every district of the Combined Area, except Ellesmere Port, the infantile mortality rate was lower than in England and Wales.

Year,	1921.	1922.	1923.	1924.	1925.
Deaths from Measles (all ages)	1	10	0	8	10
Deaths from Whooping Cough (all ages)	8	31	1	3	21
Deaths from Diarrhœa (under two years of age)	14	6	12	11	14

Registrar General's Table.	Rate per 1,000 Births. Diarrhœa & Enteritis (under 2 years).
England and Wales	8.4
105 County Boroughs and Great Towns, including London	10.8
157 Smaller Towns (1921 adjusted populations 20,000—50,000)	7.6
London	10.6

In the North West Cheshire Combined Area, the diarrhœa rate was 9. Neston, Hoylake and West Kirby, and Bebington and Bromborough record low rates, but in Ellesmere Port and Wirral Rural, the rates are considerably in excess of those in England and Wales.

The Amount of Poor Law Relief.—The whole of the combined Public Health District is within the Wirral Union except Bidston and Noctorum (Birkenhead Union) and Great Stanney (Chester Union) and with these exceptions the Union is co-extensive with the Health Area. The Union Infirmary is made use of for practically every variety of sickness, except that which entails operative interference. Operation cases are dealt with in the Cottage Hospitals and in Liverpool, Birkenhead and Chester Hospitals. So great is the demand upon the Infirmary that it has been found necessary to build a Maternity Pavilion to contain twenty beds; and there is in course of erection a set of wards for about 100 beds. Average weekly cost of in-maintenance, which "covers all the necessary expenses incurred in the provision of food, clothing and other requirements for the inmates, and in warming, cleansing and

lighting the institution and otherwise keeping it fit for daily use" was £0 9s. 10d. in 1925 ; £0 10s. 5d. in 1924 ; £0 11s. 5¼d. in 1923 ; £0 15s. 8¼d. in 1922. Statistics of the Institution from the Census volumes of the middle of the nineteenth century may not be without a passing degree of interest.—1841, 51 ; 1851, 120 ; 1861, 130 ; 1871, 100. At the 1921 Census, the population was 281 and it should be noted that practically all the residents (apart from officials) were hospital cases—a change which indicates the transition from a house of coercion and correction to an institution for the alleviation of sickness.

General Provision of Health Services in the Area.

Hospitals provided or subsidised by the Local Authority or by the County Council.

(1) Tuberculosis.—The County Council is a partner in the Joint Sanatorium at Market Drayton. It has also an Institution at Wrenbury and pays for beds in the Sanatoria of other authorities, and in Leasowe and Heswall Open-Air Hospitals for Children.

(2) Maternity.—No maternity hospitals are provided by the Local Authorities or by the County Council. A maternity hospital is provided by Messrs. Price in Bromborough for the use of the wives of their employees, and patients may now be sent from the Ante-Natal Clinic at New Ferry to it on payment of fees.

(3) Children.—No children's hospitals are provided or subsidised by the County Council, but some beds are maintained in the West Kirby Children's Convalescent Home. Bebington and Bromborough and Ellesmere Port retain each a bed in the West Kirby Convalescent Home for children from the Infant Welfare Centres.

In Ellesmere Port, the Council pays a subsidy to the Cottage Hospital Committee to retain the use of beds for sick children who attend the Infant Welfare Centre.

(4) Fever.—The whole area is served by the hospitals of the Wirral Joint Hospital Board. The main infectious diseases' hospital is situated at Clatterbridge, and has the following accommodation :—

50 beds for Scarlet Fever (main block 26, new temporary building 12, old temporary building 12).
12 beds for Diphtheria.
12 beds Enteric Fever.
2 beds for observation.

Provision has been made to receive Encephalitis patients.

Under certain conditions beds may be available for Measles.

At Pensby, there is a hospital with 12 beds for convalescent Scarlet Fever patients.

(5) SMALLPOX.—The Wirral Joint Hospital Board has entered into an agreement with the Port Sanitary Authority to use the hospital situated at New Ferry for Smallpox cases from the Combined District.

Hospitals available for the District.

There are Cottage Hospitals at Hoylake, Neston, Port Sunlight and Ellesmere Port.

All the Liverpool Hospitals are used by Wirral patients and also the Chester Royal Infirmary and Birkenhead Hospitals. The Children's Convalescent Home, West Kirby; Thingwall Children's Hospital; Leasowe Open-Air Hospital; and the Liverpool Country Hospital at Heswall, take in a certain number of local patients. Patients from the Infant Welfare Centres at Bromborough and Bebington and at Ellesmere Port are sent for orthopædic treatment to the Leasowe Open-Air Hospital.

Institutional Provision for Unmarried Mothers, Illegitimate Infants and Homeless Children.

Apart from the Poor Law Institution, the district is without accommodation for the above-named classes.

Ambulance Facilities.

(*a*) For Infectious Cases.—The Wirral Joint Hospital Board provides motor ambulances for the removal of infectious cases.

(*b*) Non-Infectious and Accident Cases.—Hoylake and Ellesmere Port provide each an Ambulance; Bebington, Bromborough and Neston have an arrangement whereby an ambulance is hired when required.

Clinics and Treatment Centres.

Maternity and Child Welfare Centres.—The County Council provides a Centre at Hoylake, Heswall, Neston and Moreton; Ellesmere Port, Bebington and Bromborough possess centres provided by the local authorities. These centres are advisory and do not undertake any treatment. Orthopædic Clinics have been organised at Ellesmere Port and New Ferry. The latter place has an Ante-Natal Clinic.

Day Nurseries.—There is one day nursery which is situated in Hoylake and receives a subsidy from the County Council.

School Clinics.—There are no school clinics with the exception of dental clinics.

Tuberculosis.—The County Council provides a dispensary at (1) West Kirby, (2) Ellesmere Port, and (3) has part use of the Birkenhead Tuberculosis Dispensary.

Public Health Officers of the Local Authority.

Each constituent authority of the Combined District has at least one fully qualified Sanitary Inspector with an additional qualification in meat inspection. Lower Bebington and Bromborough, and Ellesmere Port and Whitby employ each a qualified health visitor.

Professional Nursing in the Home :—

(*a*) General.—In every one of the large centres of population there is a district nursing organisation which provides a trained nurse. Subscriptions from charitable persons, and small charges for services rendered, serve to support the organisation. No scheme of co-ordination exists with the work of the Local Authorities.

(*b*) For Infectious Diseases.—There are no arrangements for nursing Measles cases.

Midwives.—There are 45 midwives practising in the district, 39 of whom possess midwifery certificates.

Chemical Work.—The arrangement in force is that the chemical work should be carried out by the County Analyst at the expense of the County. The work consists of analysis of water samples. Food and drugs throughout the area are sub-

mitted for analysis to the County Analyst. The samples are taken by County officers. Under the report to each constituent authority of the Combined District, a table is given of the number and nature of samples taken and the results of analysis.

Legislation in Force.—A list of local and general adoptive acts and bye-laws is given under each district report.

Sanitary Circumstances of the Area.

Water.—The piped supply of water is from deep wells in the New Red Sandstone. Neston and Parkgate Urban District Council have been the proprietors of the wells supplying their district for many years, while dividend earning Companies, viz., Hoylake Gas and Water Company, Wirral Water Company, and the West Cheshire Water Company controlled the supply of the remainder of the Combined Area. In 1925, the Water Companies disposed of their undertakings to Birkenhead Corporation, Hoylake and West Kirby Urban District Council and the West Cheshire Water Board. The latter Board now supplies Bebington and Bromborough Urban District, Ellesmere Port and Whitby Urban District and the townships in the Rural District which formerly were supplied by the West Cheshire Company (*Wirral Rural Report, page* 144). All the water supplied is of an exceptional degree of organic purity, and analyses by the County Analyst in 1925 show the following results :—

Physical Characters.—In all samples.

Appearance, clear and colourless in each sample.

Odour when heated to 37 degrees C., odourless, each sample.

Chemical Analysis. (*All results expressed in grains per gallon*).

	Neston.	Hoylake.	West Cheshire.
Total solids in solution ...	23.4	26.6	31.5
Non-volatile solids	22.0	23.3	30.4
Loss on ignition	1.4	3.3	1.1
Total Solids in suspension ...	Nil.	Nil.	Nil.
Non-volatile solids	—	—	—
Loss on ignition	—	—	—

	Neston.	Hoylake.	West Cheshire.
Combined Chlorine	2.0	5.5	5.1
Caustic Alkali (in terms of Ca 0)	—	—	—
Free Acid (in terms of H 2, S.O. 4)	—	—	—
Oxygen absorbed in 15 mins. at 18 degrees C. ...	Nil.	Nil.	Nil.
Oxygen absorbed in 3 hours at 18 degrees C. ...	Nil.	Nil.	0.0027
Free and Saline Ammonia ...	Nil.	Nil.	Nil.
Albuminoid Ammonia ...	0.0007	0.0007	Nil.
Nitrous Nitrogen (nitrite) ...	Nil.	Nil.	Nil.
Nitric Nitrogen (nitrate) ...	0.60	0.10	0.049
Total Hardness	14.0	15.7	8.4
Temporary Hardness ...	9.4	9.9	8.4
Permanent Hardness ...	4.6	5.8	Nil.

The Secretary to the Water Board reports on the quantity of water which can be pumped and the storage capacity as follows :—

Prenton Pumping Station, 1,350,000 gallons (maximum).
Hooton Pumping Station, 1,450,000 gallons (maximum).

Total, 2,800,000 gallons.

Storage—

Prenton Top Reservoir	600,000	gallons
Prenton Lower Reservoir	1,900,000	,,
Whitby Water Tower	200,000	,,
Heswall Water Tower	100,000	,,
	2,800,000	,,

Rivers and Streams, Drainage and Sewerage, Closet Accommodation, Scavenging, Sanitary Inspections and Schools are dealt with in the District Reports.

Housing.—Housing conditions and matters connected therewith are detailed in the District Reports under the headings appointed by the official Memorandum. The continued increase in the amount of house building since 1921 is shown in the following table.

Year.			Houses Completed.
1921	...	...	268
1922	...	...	501
1923	...	...	599
1924	...	...	938
1925	...	...	1,177
	Total	-	3,483

The worst permanent housing is found in the old townships but in these same townships where modern development has taken place, cottages of excellent type have been erected. A difference of opinion may arise on the definition of the term " cottage " for the least substantial of the new brick dwellings are incomparably superior in the accommodation provided and in their internal arrangements, to the buildings which formerly housed the labouring classes. Passing of the farms to the building contractor may perhaps have removed the need for the labourers' cottage let at a cheap rental. Weir and Atholl houses and parallel methods of construction have not appeared in the Peninsula, but in the event of their making an appearance they could scarcely expect to be exempt from the prejudice which all innovations apparently must incur. When thatched roofs gave place to tiles in building construction, a writer of the day commented on the change thus :—

> . . . " Of late they are generally covered with pan-tiles. They have a more agreeable appearance than the old thatch roofs ; but there are many inconveniences attending them, especially in a County subject to high winds, which often uncover large spaces of the roof, and break a great quantity of tiles. They are extremely cold in winter and excessively warm in summer. In short they make an unpleasant and expensive covering for any kind of buildings."

Houses which are not reasonably fit for habitation, which let the water drip within them and have other intolerable conditions, destroy national tranquility.

> *Thou sayest, that dropping houses, and eke smoke,*
> *And chiding wives maken men to flee*
> *Out of hir owen hous.*

Inspection and Supervision of Food.

Progress is obvious throughout the area in the methods of exposure for sale and handling of all varieties of food stuffs. Legislative interference is probably a lesser factor in this desirable state of affairs than the pressure brought to bear upon traders by the desires of a public better educated in sanitary matters. Bottling of milk and wrapping of bread are much upon the increase. Weather conditions, the disappearance of manure middens, and direct attacks, have lessened for the time being the numbers of the house-fly, which is no longer regarded as a harmless and necessarily ubiquitous attendant on all cookery operations. It is only within recent years that a definite campaign has been waged against this pestilent insect and yet one finds fourteenth century Chaucer levelling the reproach against the cook that " In the shop goth many a fly los." Meat is no longer handled by purchasers, it is protected from dust and it is transported in cleanly fashion. Fish and chickens still receive more than their due portion of " matter in a wrong place," and here also the public has its remedy in its own hands. Bebington and Bromborough, Hoylake and West Kirby and the Wirral Rural District have adopted the bye-law requiring the use of a mechanical stunning instrument before the slaughter of animals for food. One hundred and ninety local authorities have now adopted this bye-law.

Condemned meat is disposed of to manure manufacturers, to the kennels, and at the incinerators. Contrast this disposal with that of medieval times, when regulations in London, Oxford and Scottish Burghs enforced the sending of putrid confiscated meat to hospitals.

The following quotation is from Herbert Spencer's Social Statics. The philosopher was not enamoured of state interference to protect public health :—

> " Health depends upon the fulfilment of numerous conditions—can be ' protected ' only by ensuring that fulfilment ; if, therefore, it is the duty of the state to protect the health of its subjects, it is its duty to see that all the

conditions of health are fulfilled by them. Shall this duty be consistently discharged? If so, the legislature must enact a national dietary; prescribe so many meals a day for each individual; fix the quantities and qualities of food, for both men and women; state the proportion of fluids, when to be taken, and of what kind; specify the amount of exercise, and define its character; describe the clothing to be employed; determine the hours of sleep, allowing for the difference of age and sex; and so on, with all other particulars, necessary to complete a perfect synopsis, for the daily guidance of the nation, and to enforce these regulations it must employ a sufficiency of duly qualified officials, empowered to direct everyone's domestic arrangements."

Sale of Food and Drugs Acts.

Particulars of samples forwarded to the Public Analyst from the District during the year ending 31st December, 1925.

Name of Samples.	Number Analysed.	Number of Samples Certified as Adulterated or not up to Standard.
Butter	44	—
Cakes and Pastry	1	—
Camphorated Oil	1	—
Castor Oil	2	—
Cheese, Cheshire	13	1
Cheese, Gruyere	2	—
Cocoa	3	—
Cream	8	2
Cream, Preserved	5	—
Epsom Salts	1	—
Flour	1	—
Ginger	2	—
Gregory's Powder	2	—
Lard	24	—
Liquorice Powder	2	—
Margarine	5	—
Milk	87	5
Milk, Condensed	5	—
Olive Oil	1	—
Pepper	2	—
Seidlitz Powder	3	—
Sweets (Gums)	6	—
Totals - -	220	8

The Chief Inspector of Food and Drugs for the County of Chester, who supplied the foregoing table, states that five samples of milk were reported against as follows :—

1 Adulterated with 3.5 per cent. of water
2 ,, 9.4 ,, ,,
3 Deficient in fat to the extent of 11.6 per cent.
4 ,, ,, ,, 12.6 ,,
5 ,, ,, ,, 14.6 ,,

With regard to 1, inasmuch as the sample contained 3.4 per cent. fat, the case was not considered sufficiently serious to warrant a prosecution and the seller was cautioned.

Proceedings were taken against the seller of 2, and a fine of 10/- and 10/6 costs was imposed.

Proceedings were also taken against the sellers of samples 3,4, 5, but in each case the seller satisfied the Magistrates that the milk had not been tampered with and in accordance with the decision in Hunt v. Richardson, the cases were dismissed.

Elaborate safeguards are devised to protect our food and drugs, but no protection is vouchsafed to the credulous who rely on quack remedy vendors with their "mountebank advertisements, promising the beauty of Helen in a bottle of cosmetic, and the age of old Parr in a box of pills."

Prevalence of, and Control over, Infectious Diseases.

Infectious Diseases Generally.

The occurrence of infectious diseases is a part of human geography, and as the Wirral Peninsula is a mere node on the line of communication between Wales and the North Midlands, and Liverpool and Lancashire, there will be inter-relationship between outbreaks in Wirral and these areas. Epidemic disease is traceable from the industrial area along the Mersey, across the Peninsula to the residential Dee-side communities. Children coming from the Mersey side who attend School in

West Kirby, probably at times convey infection and undoubtedly show priority where Liverpool has epidemic outbreaks. Recent prevalence of epidemic disease in Liverpool was reflected in the returns of infectious cases from the Wirral Institutions which accommodate Liverpool invalids.

SMALL POX.—In the period 1921-1925 Small Pox was notified on one occasion (in two children) in the Bebington area. The source of infection was a person from Gainsborough, in Lincolnshire. The children were unvaccinated, but made a good recovery. The following table shows the number of births, successful vaccinations, and conscientious objectors in each registration district from 1920-1924.

Year.	District.	Number of Births.	Successfully Vaccinated	C'scientious Objectors.
1920	Bebington	499	352	78
	Eastham	557	216	239
	Neston	271	200	24
	Woodchurch	431	314	40
		1,758	1,082	381
1921	Bebington	389	266	71
	Eastham	473	144	249
	Neston	246	183	29
	Woodchurch	415	302	52
		1,523	895	401
1922	Bebington	393	291	68
	Eastham	427	147	218
	Neston	235	153	28
	Woodchurch	407	298	48
		1,462	889	362
1923	Bebington	399	300	63
	Eastham	468	241	152
	Neston	209	165	10
	Woodchurch	444	322	38
		1,520	1,028	263
1924	Bebington	368	278	51
	Eastham	446	231	167
	Neston	229	188	8
	Woodchurch	424	269	36
		1,467	966	262

Figures are available for successful vaccinations, per cent. of births, in England and Wales during the years 1921, 1922, 1923 and these may be compared with North-West Cheshire figures in the same years.

	England and Wales.	N.W. Cheshire.
1921	30.83	58.7
1922	40.3	60.8
1923	47.8	67.6

Scarlet Fever. Ellesmere Port showed the greatest incidence of Scarlet Fever in the area in 1924-1925. Neston remained comparatively free throughout the five years 1921-1925, showing a case rate much below the rate for England and Wales. Bebington and Bromborough had comparatively heavy rates 1921-1923, and Hoylake and West Kirby had a large outbreak in 1923. The circumstances of all return cases are fully investigated ; 19 were noted in the period 1921-1925. More cases than one were notified at the same time from the same houses in 1925 in twenty instances, viz. :—

Sixteen houses with two cases ; three houses with three ; and one with four.

Diphtheria.—The Diphtheria rate was high in Ellesmere Port in 1921, and in Hoylake in the same year. Neston showed a high rate in 1923 and 1924. Diphtheria Antitoxin is supplied at the public cost in all the districts to persons unable to obtain it for themselves.

Enteric Fever.—The incidence of Enteric Fever is small throughout North-West Cheshire. Ellesmere Port had no cases reported in the period under review, and Neston only one.

Erysipelas.—No cases of Erysipelas were notified in Neston from 1921-25.

Statistics of Wirral Joint Hospital 1925.

Disease.	Number of patients admitted.
Scarlet Fever	177
Diphtheria	44
Measles	52
Chicken Pox	6
Puerperal Fever	2
Erysipelas	9
Encephalitis Lethargica	1
Enteric Fever	1
Colitis	1

Swabs taken in bacteriological investigations at the hospital numbered 66—18 positive, 48 negative. The Enteric Fever case was confirmed by a blood examination.

Arrangements made for examination of bacteriological specimens are the same in all the districts, viz. :—examinations of specimens at the Laboratories of the Clinical Research Association free of cost to patient and practitioner. On 37 occasions in 1925, opportunity was taken to obtain the advantages offered by the contract of the Councils. A large amount of bacteriological and pathological work is carried out at private cost, and the proximity of the Liverpool University and City Laboratories facilitates the acquisition of expert opinions on material submitted.

Non-notifiable Acute Infectious Diseases.—Advance was made two years ago in the direction of hospital treatment for Measles patients. During 1925, practitioners sent in 52 cases to the available beds in the isolation hospital, so there can be no doubt that opportunity to segregate bad measles, under trained nurses in the best possible surroundings, is appreciated.

Why Whooping Cough, with its toll of fatalities should still be regarded as a slight complaint requiring no treatment, remains a mystery. Health visitors visit and give advice on the need for treatment in the so-called minor infectious diseases.

From other sections of this report, it will be seen that the Bebington and Bromborough, and Ellesmere Port and Whitby Councils employ Health Visitors. Hoylake and West Kirby is the centre of the district of one of the County Health Visitors. District Nursing Associations provide in many parishes trained nurses who undertake nursing duties for minor infectious complaints. School intimations of infectious disease are used in all the districts and these give information not only of the names and addresses of children suffering from notifiable infectious diseases, but also of any absences which are suspected to be due to any form of infectious illness. Throughout 1925 non-notifiable infectious diseases abounded :—

Bebington and Bromborough.—Measles, Mumps, Chicken Pox, Whooping Cough.

Ellesmere Port and Whitby.—Measles and Whooping Cough. A few cases of Mumps and Chicken Pox were reported.

Hoylake and West Kirby.—Measles and Whooping Cough, Chicken Pox and Impetigo.

Neston and Parkgate.—Measles, Mumps, Whooping Cough, Influenza.

Wirral.—Measles, Whooping Cough, Mumps, Impetigo, Chicken Pox and Influenza.

Table of Age Groups Showing Total Cases and Deaths, 1925.

N.W. CHESHIRE COMBINED (P.H.) DISTRICT.

Disease		Total Cases	Total		0-1		1-2		2-3		3-4		4-5		5-10		10-15		15-20		20-35		35-45		45-65		65 up	
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Total Cases ...	...	413	201	212	4	2	10	7	9	10	8	12	10	17	63	55	20	29	14	17	24	29	18	12	16	13	5	9
Total Deaths ...	...	84	45	39	8	8	5	...	1	3	...	...	...	1	4	3	1	1	1	...	3	6	7	4	9	8	6	5
Small Pox	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	Cases	203	87	116	1	...	3	2	6	6	6	8	5	10	44	43	12	20	5	10	4	11	1	6	...	...	...	...
	Deaths	3	1	2	...	...	...	...	...	1	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria	Cases	46	17	29	...	...	2	...	2	3	1	2	1	3	7	8	3	6	1	2	...	4	...	...	...	...	...	1
	Deaths	3	...	3	...	...	...	...	...	1	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever (including paratyphoid)	Cases	5	5	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	1	...	2		...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia	Cases	124	80	44	3	2	4	5	1	1	...	1	4	4	11	4	4	3	6	2	18	4	12	5	12	7	5	6
	Deaths	69	40	29	8	8	4	...	1	1	...	...	...	...	3	1	1	1	1	...	3	2	5	4	8	7	6	5
Puerperal Fever	Cases	10	...	10	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	8	...	1	...	...	...	...
	Deaths	3	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...
Cerebro Spinal Fever	Cases	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
	Deaths	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Acute Poliomyelitis	Cases	1	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Polio-encephalitis	Cases	1	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	1	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica	Cases	4	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	1	...	...	...
	Deaths	3	1	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	...	...
Erysipelas	Cases	18	6	12	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	2	...	2	1	...	3	6	...	2
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Table of Age Groups showing Total Cases and Deaths.

North-West Cheshire Combined (Public Health) District, 1921-25.

Disease.		Total Cases	Total		0-1		1-2		2-3		3-4		4-5		5-10		10-15		15-20		20-35		35-45		45-65		65up	
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Total Cases		2143	1074	1069	16	11	44	33	41	45	40	54	52	51	336	309	164	170	77	93	126	133	78	70	72	68	28	32
Total Deaths		382	221	161	28	28	18	21	6	9	5	6	2	4	16	7	6	2	2	2	20	15	39	18	49	26	28	23
Small Pox	Cases	2	...	2	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	Cases	978	428	550	2	2	18	12	21	30	23	30	27	35	17	207	103	120	33	48	24	48	6	16	...	2	...	...
	Deaths	7	2	5	...	...	...	...	...	1	...	1	...	2	1	...	1	...	...	...	...	...	...	1	...	...	...	...
Diphtheria	Cases	316	154	162	1	1	7	3	8	9	6	10	10	8	62	40	37	30	11	26	6	22	3	7	3	6	...	...
	Deaths	25	14	11	1	...	...	2	2	2	1	1	...	1	10	4	...	...	...	...	...	1	...	...	...	...	...	...
Enteric Fever (including paratyphoid)	Cases	31	19	12	...	...	...	...	...	...	...	...	...	...	2	...	1	3	2	2	5	1	6	4	2	2	1	...
	Deaths	4	3	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	1	...	...	...	...
Pneumonia	Cases	485	320	165	10	4	14	4	7	4	6	4	10	5	32	19	14	10	26	9	81	24	50	23	49	26	21	23
	Deaths	315	192	123	27	27	16	18	4	6	3	2	2	1	4	2	5	2	2	1	18	8	35	11	48	23	28	22
Puerperal Fever	Cases	28	...	28	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	23	...	4	...	...	...	...
	Deaths	9	...	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	5	...	3	...	...	...	...
Cerebro Spinal Fever	Cases	2	2	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...
	Deaths	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Poliomyelitis	Cases	6	2	4	...	...	1	1	...	...	1	2	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	3	...	3	...	1	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Polio-encephalitis	Cases	4	3	1	...	...	2	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	4	3	1	...	...	2	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica	Cases	24	14	10	...	...	...	...	...	...	...	...	...	...	2	1	5	...	2	1	3	3	1	2	1	2	...	1
	Deaths	8	2	6	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	1	...	1	1	2	...	1
Dysentery	Cases	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
	Deaths	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...
Erysipelas	Cases	107	38	69	...	...	...	...	1	...	1	...	...	...	...	1	...	2	2	6	4	9	8	13	16	30	6	8
	Deaths	4	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	1	...	...
Malaria	Cases	6	5	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	2	1	1	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chicken Pox	Cases	153	88	65	3	4	2	2	4	2	2	8	5	3	66	39	4	4	1	...	...	3	1	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

3. Notifiable Diseases during the period 1921-25.

Disease.	Total Cases Notified	Total Cases Treated in Hospital	Total Deaths.
Small Pox	2	2	—
Scarlet Fever	978	809	7
Diphtheria	316	241	25
Enteric Fever (including Paratyphoid)	31	20	4
Pneumonia	485	144	315
Puerperal Fever	28	19	9
Cerebro Spinal Fever ...	2	1	1
Acute Poliomyelitis ...	6	1	3
Acute Polio-encephalitis ...	4	1	4
Encephalitis Lethargica ...	24	5	8
Erysipelas	107	39	4
Total - -	1983	1262	380

Tuberculosis, 1925.

Age Periods	NEW CASES.				DEATHS.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
Years								
0-1	—	—	1	1	—	—	1	3
5	—	1	10	11	—	—	5	5
10	2	1	5	5	—	1	—	1
15	2	1	2	3	—	1	1	—
20	2	4	1	1	—	—	—	—
25	8	12	2	2	4	7	—	—
35	12	25	1	3	8	8	—	—
45	9	8	1	1	3	7	—	2
55	6	4	—	1	7	5	—	—
65	3	—	—	—	5	1	—	—
65 and upwards ...	2	—	—	—	2	—	—	—
Totals ...	46	56	23	28	29	30	7	11

Tuberculosis Mortality in North-West Cheshire 1921-25.

Year.	Number of deaths.
1921	68
1922	64
1923	75
1924	67
1925	77

Tuberculosis Mortality in England and Wales 1920-24, is shown in the following table :—

Year.	Number of deaths.
1920	42,545
1921	42,678
1922	42,777
1923	40,788
1924	41,103

One-hundred-and-sixty-five examinations of sputum from residents in North-West Cheshire, made to determine the presence of tubercle bacilli at the County Tuberculosis office, gave the following results :—

	Positive	Negative	Total
Bebington and Bromborough U.D. ...	6	28	34
Ellesmere Port and Whitby U.D. ...	6	28	34
Hoylake and West Kirby U.D. ...	12	24	36
Neston and Parkgate U.D.	5	7	12
Wirral R.D.	14	35	49
	43	122	165

1925.

	Cases.			Vision unimpaired	Vision impaired.	Total Blindness.	Deaths.
	Notified.	Treated.					
		At Home.	In Hospital.				
Ophthalmia Neonatorum	4	2	2	4	Nil.	Nil.	Nil.

1921-25.

	42	30	12	40	2	Nil.	Nil.

Mr. H. F. Russell kindly supplied the following report on rainfall recorded at Neston 1921-25.

Monthly Record of the Rainfall at Neston, 1921-1925.

DAILY RECORDS COMMENCED AT THIS STATION, JANUARY 1st, 1869.

Year.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total for Year.	Total No. of days with .01" or more.
1921	3.06	.23	1.00	.91	1.32	.22	1.07	3.51	.85	2.46	2.57	2.79	19.99	163
1922	3.66	1.63	1.55	1.87	.69	1.95	3.82	3.35	2.45	.43	1.35	3.20	25.95	188
1923	1.48	3.31	.71	1.74	3.46	.44	2.74	2.56	2.63	3.87	2.62	3.63	29.19	214
1924	1.74	.63	.52	1.73	5.38	1.73	5.96	4.25	3.45	3.16	1.70	2.91	33.16	202
1925	1.60	4.03	.71	1.60	2.45	—	2.21	3.95	4.57	3.84	3.02	2.82	30.80	189

The average rainfall at Neston, taken over a period of 56 years is 28.24 inches. The outstanding features for the year 1921-25 are March, 1925, and June, 1925, being the lowest rainfall recorded for these months since 1869. The rainfall for May, 1924, has only been exceeded by May 1886, when 5.61 inches were recorded.

The greatest fall for one day was 31st May, 1924, when 2.90 inches were recorded, a record for this station.

Mr. J. R. Fleming, Chairman of the Neston Health Committee, has kindly supplied the following schedule which is applicable to the whole area :—

Building Trades Wage Schedule, 1921-1925.

	1921			1922			1923		1924	1925
	Jan.	June	Aug.	Jan.	May	Nov.	J'ne	July	Jan.	Jan.
ons	2/4	2/2	2/2	2/2	1/10	1/9	No change	1/9	No change	No change
Labourers	2/0½	1/10½	1/9½	1/9½	1/5½	1/4½		1/4		
klayers	2/4	2/2	2/2	2/2	1/10	1/9		1/9		
, Labourers ...	2/0½	1/10½	1/9½	1/9½	1/5½	1/4½		1/4		
ers	2/4	2/2	2/2	2/2	1/10	1/9		1/8½		
, Tool money (per day)	6d.	6d.	6d.	6d.	4d.	4d.		4d.		
ers	2/4	2/2	2/2	2/2	1/10	1/9		1/9		
Labourers	2/0½	1/10½	1/9½	1/9½	1/5½	1/4½		1/4		
terers	2/4	2/2	2/2	2/2	1/10	1/9		1/9		
,, Labourers ...	2/0½	1/10½	1/9½	1/9½	1/5½	1/4½		1/4		
ibers	2/5	2/3	2/3	2/3	1/11	1/10		1/9		
ters	2/4	2/2	2/2	2/2	1/10	1/9		1/8½		
eral Labourers & Navvies	2/-	1/10	1/9	1/9	1/5	1/4		1/3½		

Bebington and Bromborough Urban District.

This Urban District was formed on 1st April, 1922, by fusion of the Urban Districts of Higher and Lower Bebington and Bromborough.

1. General Statistics.

Area (acres)	3,446
Population (1921)	19,104
Estimated Population (1925)	20,610
Number of inhabited houses (1921)	3,742
Number of families or separate occupiers (1921) ...	4,010
Rateable value	£175,742
Sum represented by a penny rate	£681

Social Conditions and Chief Occupations.—These are shown in the following table from the Census Volume 1921.

Occupation.	Males.	Females.
Total Population	9,578	9,526
Aged 0-11	2,315	2,159
Aged 12 and upwards	7,263	7,367
I. Fishermen	11	0
II. Agricultural Occupations	286	8
III. Mining and Quarrying Occupations	9	0
IV. Makers of Coke, Lime, Cement, etc.	2	0
V. Makers of Bricks, Pottery, Glass	3	0
VI. Workers in Chemicals, Paints, etc.	481	132
VII. Metal Workers	631	13
VIII. Workers in Precious Metals	0	0
IX. Electrical Apparatus Makers, Fitters, etc. ...	95	0
X. Makers of Watches, etc.	8	0
XI. Workers in Skins ; Leather Goods Makers ...	7	1
XII. Textile Workers	4	7
XIII. Makers of Textile Goods and Articles of Dress	39	75
XIV. Makers of Foods, Drinks and Tobacco ...	98	33
XV. Workers in Wood, etc	314	8
XVI. Paper Workers ; Printers, etc.	167	191
XVII. Builders, Bricklayers, etc.	231	1
XVIII. Painters and Decorators	65	0
XIX. Workers in other Materials	2	0
XX. Workers in Mixed and Undefined Materials ...	61	1
XXI. Persons in Gas, Water, Electricity Supply ...	4	0
XXII. Transport Workers	736	26
XXIII. Commercial and Financial Occupations ...	366	182
XXIV. Public Administration and Defence	90	26
XXV. Professional Occupations	177	144
XXVI. Persons Employed in Entertainments, etc. ...	15	4
XXVII. Persons Employed in Personal Service ...	81	638
XXVIII. Clerks, Draughtsmen, Typists, etc.	693	433
XXIX. Warehousemen, etc.	189	252
XXX. Stationary Engine Drivers, etc.	160	0
XXXI. All other occupations	1,385	31
Total Occupied	6,410	2,206
XXXII. Unoccupied and Retired	853	5,161
Total Occupied and Unoccupied	7,263	7,367

The figures in the previous table include :—

	Males.	Females.
Gardeners	165 ...	—
Chemical Workers...	96 ...	13
Makers of Paints, Oils, Grease, etc.	38.4 ...	118
Cardboard Box Makers	— ...	122
Shipbuilders	45 ...	—
Railway Workers	112 ...	—
Seamen, etc.	91 ...	—
Domestic Servants	— ...	470
Members of Defence Force	412 ...	—

The natural increase of the population, that is the excess of births over deaths is shown in the following table :—

Year.	Population.	Natural Increase per 1,000 population.
1921	19,373	11.4
1922	19,600	9.0
1923	19,870	9.4
1924	20,230	8.6
1925	20,610	6.5

2. Extracts from Vital Statistics of the Year 1925.

These statistics are calculated on the population of 20,610 supplied by the Registrar General.

Births.

	Total.	Males.	Females.
Legitimate ...	313	172	141
Illegitimate ...	8	3	5
	321	175	146

Birth Rate (R.G.) 15.5

Table of Number of Births and Birth Rates, 1920-1924.

Year.	Number.	Birth Rate.
1920	506	26.4
1921	379	19.6
1922	375	19.1
1923	360	18.1
1924	341	16.8

The average number of births per annum in the years 1920-24 was 392.

Deaths.

Total, 185 ... Males, 95 ... Females, 90
Death Rate (R.G.) 8.9. The standardised death rate was 9.7

Table of Number of Deaths and Death Rates, 1920-1924.

Year.	Number	Death Rate.
1920	189	10.3
1921	158	8.1
1922	197	8.9
1923	172	8.6
1924	168	8.3

The average number of deaths per annum in the years 1920-1924 was 176.

33.5% of the deaths were in the age periods 65 years and upwards.

Number of women dying in or in consequence of

Childbirth	(from Sepsis)	0
—	(from other causes)	2

Deaths of infants under one year of age per 1,000 births, 62. Legitimate 17. Illegitimate 3. Total, 20.

Table of Infantile Mortality, 1920-1924.

Year.	Rate per 1,000 Births.
1920	73.1
1921	65.9
1922	64.0
1923	47.2
1924	43.9

Deaths from Measles (all ages)	1
Deaths from Whooping Cough (all ages)	2
Deaths from Diarrhœa (under 2 years of age) ...	2

The deaths from Measles in the preceding five years were 6, from Whooping Cough 5, and from Diarrhœa (under 2 years of age) 16.

There was no unusual or excessive mortality during the year.

Causes of Death.

All Causes.		Males.	Females.
1.	Enteric Fever	0	0
2.	Small Pox	0	0
3.	Measles	1	0
4.	Scarlet Fever	1	1
5.	Whooping Cough	1	1
6.	Diphtheria	0	0
7.	Influenza	1	1
8.	Encephalitis Lethargica	0	1
9.	Meningococcal Meningitis	0	0
10.	Tuberculosis of Respiratory System	6	8
11.	Other Tuberculous Diseases	2	2
12.	Cancer, Malignant Disease	9	12
13.	Rheumatic Fever	0	1
14.	Diabetes	3	1
15.	Cerebral Hæmorrhage, &c.	7	8
16.	Heart Disease	13	16
17.	Arterio Sclerosis	6	5
18.	Bronchitis	2	3
19.	Pneumonia (All forms)	8	3
20.	Other Respiratory Diseases	1	2
21.	Ulcer of the Stomach or Duodenum	2	2
22.	Diarrhœa, &c. (under 2 years)	0	2
23.	Appendicitis and Typhlitis	0	1
24.	Cirrhosis of Liver	0	0
25.	Acute and Chronic Nephritis	1	1
26.	Puerperal Sepsis	0	0
27.	Other Accidents and Diseases of Pregnancy and Parturition	0	2
28.	Congenital Debility and Malformation, Premature Birth	8	2
29.	Suicide	1	0
30.	Other Deaths from Violence	3	3
31.	Other Defined Diseases	19	11
32.	Causes Ill-defined or Unknown	0	1
	Totals - -	95	90

General Provision of Health Services in the Area.

Hospitals provided or subsidised by the Local Authority—or by the County Council—*See under North West Cheshire, p. 23*

Any Institutional Provision for unmarried mothers, illegitimate infants, and homeless children in the district ... Nil

Ambulance Facilities :—

(*a*) For Infectious Disease Cases.—The Wirral Joint Hospital Board Ambulances.

(*b*) For Non-Infectious and Accident Cases.—Arrangements with Messrs. Lever, Port Sunlight, whereby an ambulance is provided when required.

Clinics and Treatment Centres.—The Local Authority provides 3 Infant Welfare Centres.

Public Health Staff :—

There is a qualified Inspector holding the Sanitary Inspector's Certificate and a Certificate of Proficiency in Meat Inspection.

One Assistant Inspector who has the Sanitary Inspector's Qualification is employed.

Clerical assistance is provided.

One Health Visitor, with Nursing, Maternity, Health visiting and Sanitary experience, finds full time employment in the area—she is a state registered nurse, with the Certificate of the Central Midwives' Board, the Sanitary Inspectors' Qualification and the Health Visitors' Certificate.

Professional Nursing in the Home :—

(*a*) General. One district nurse maintained by a private organisation.

(*b*) For infectious diseases, Nil. Measles, Nil.

Midwives.—There are 13 midwives practising in the district, and of these 12 are certificated.

Chemical Work.—Samples of water are sent from the district to the County Analyst. Food and drug samples are taken by the County Council Inspectors and submitted to the same official for analysis.

List of Adoptive Acts, Bye-Laws, Regulations.

Infectious Diseases Prevention Act	1890
Public Health Acts Amendment Act, Parts I., II., III.	1890
Public Libraries Acts	1892-1919
Private Street Works Act	1892
Notification of Births Acts	1907 & 1915
Public Health Acts Amendment Act	1907

Regulations.

Dairies, Cowsheds and Milkshops Regulations.

Bye-Laws.

Relating to—

Cleansing of Footways and Pavements	1901
Common Lodging Houses	1901
Houses Let in Lodgings, &c.	1901
Nuisances	1901
Slaughter-houses	1924
Hackney Carriages	1902
Tents, Vans, Sheds	1906
New Streets and Buildings	1917

PORT SUNLIGHT COTTAGE HOSPITAL.—This is a well-equipped modern institution which was established in 1907 to meet the hospital needs of Messrs. Levers' Employees and their dependents. There is a medical officer in residence and the management is vested in a committee.

MATERNITY HOME, BROMBOROUGH POOL.—An establishment intended primarily for the wives of the workers in Messrs. Price's Works.

Sanitary Circumstances of the Area.

WATER.—The whole area is supplied from the works of the Water Board, which has acquired the West Cheshire Water Company's undertaking—*see page 26*

There are 53 cases in which water is not laid on within the dwelling, but where the supply is from stand pipes.

Domestic supply in the Bromborough area has recently been somewhat curtailed by industrial demands, and the laying of new mains is now being carried out as rapidly as possible to cope with this, and with the growth of the district.

Rivers and Streams.—Bromborough Pool, a tidal arm of the Mersey, is within the district and is the outlet to a number of streams which drain Central Wirral. Effluents from sewage purification works, and in some cases crude sewage-discharges enter these streams, but there have been no complaints during recent years.

Drainage and Sewerage.—The sewers are on the combined system and their contents are derived not only from the urban district but also from part of the rural area and Birkenhead. Sewering and construction of purification works has been going on for the past three years in the Bromborough area, and two out of three sections of this work have been completed. No method of purification is adopted in the case of the older sewered portions of the area, which are provided with two main outfall sewers into the tidal waters of the Mersey. At the southern outfall, a tank with a Penstock valve retains the crude sewage until such time as the tide suits for its discharge. The northern outfall drains New Ferry and Pool Wards, and opens directly into the Mersey near the former site of New Ferry Pier. Arrangements for drainage, sewerage and sewage disposal are adequate in all parts of the district.

Closet Accommodation.—Modern water-closets of good type are the rule and conversions of other forms of accommodation have taken place wherever houses were within reasonable distance of the sewers. There are 6 sanitary conveniences used in common, 25 pail closets, 7 earth closets, 21 privy middens, and these constitute the sole exceptions to the water-closet rule. Public conveniences are maintained in Park, Sunlight (2) and Bebington Wards.

Scavenging.—Strict surveillance is maintained over the scavenging arrangements which are efficient and well carried

out. There are 157 fixed ashpits and 4,522 covered galvanised iron bins. Attempts to obtain the substitution of modern receptacles for the old insanitary, fixed ashpits show a considerable degree of success, for in 1922 the latter were 525 in number.

The Council employs its own staff to remove refuse, and disposes of it by a refuse destructor which was erected in 1913. The plant is of sufficient size to serve a population of 24,000. Agricultural land tips are used in the outlying parts of the district. Trade and stable refuse are removed without charge.

Sanitary Inspection of the Area.

The following table is supplied by the Inspectors, (1925) :—

Inspected.		Notices Served	
		Informal	Statutory
Dwelling Houses (First Visits)	617	636	—
Dwelling Houses (Re-inspections)	3611	491	144
Tents, Vans, Sheds, &c. ...	40	6	2
Courts, Passages, &c.	50	33	5
House Drainage	1505	120	17
Cesspools	36	3	0
Privy Middens, &c.	102	6	2
Ditches, Water Courses, &c. ...	4	1	1
Offensive Accumulations ...	70	52	2
Keeping of Animals	115	6	1
Slaughter-houses	173	3	—
Offensive Trades	5	1	—
Butchers' Shops	268	15	—
Fresh and Fried Fish Shops ...	30	6	—
Other Food Premises	28	5	—
Piggeries	112	6	—
Dairies, Cowsheds, &c. ...	176	22	—
Factories and Workshops ...	130	24	—
Bakehouses (Overground) ...	89	14	—
Bakehouses (Underground) ...	6	1	—
Smoke Observations ...	18	—	—
Public Schools	58	1	—
Public Conveniences	84	4	—
Places of Entertainment ...	8	1	—
Infectious Disease Inquiries	123	—	—
Infectious Disease Re-visits ...	85	40	2
Miscellaneous	132	11	—
Totals -	7,735	1,508	170

Schools.—There are 8 Public Elementary Schools providing accommodation for 3,792 children. One school is out of repair, and has passed the stage where it would be an economic proposition to attempt to re-model it to comply with modern regulations. Proposed school developments, subject in one instance to further consideration, are the building of three schools, to accommodate 1,520 children, so placed as to relieve the present need for extension and to serve future growth of the area. All the schools are on the main water supply and they are all provided with water-closets. Six of them have sanitary dust bins and two have fixed ashpits.

Housing.

1. General Housing Conditions in the Area.

(1) General Housing Conditions. — Housing conditions are in general good, but their variation is within wide limits passing through gradations from old, badly constructed habitations in narrow ill-placed streets to the model cottages with excellent amenities of Port Sunlight and Bromborough.

(2). (*a*) At the time of the Census, *i.e.*, prior to the amalgamation of Bromborough, Higher Bebington and Lower Bebington, the following percentages of the population occupied 4 and 5 roomed houses :—

Area.	4-roomed Houses.	5-roomed Houses.
Bromborough	37.4	25.2
Higher Bebington ...	21.5	16.5
Lower Bebington ...	37.5	24.3

Under 4 rooms and over 5 rooms, the percentages were—

Area.	Under 4 Rooms.	Over 5 Rooms.
Bromborough	14.6	22.8
Higher Bebington ...	26.0	36.0
Lower Bebington ...	17.1	21.1

In Bromborough the average number of rooms per person was 1.17 ; in Higher Bebington, 1.14 ; and in Lower Bebington, 1.0.

(*b*) Measures taken or comtemplated to meet any shortage :—

The Council's Housing Schemes are carried out with a view to reduce the shortage of working class dwellings, and private enterprise is encouraged through grants under the Small Dwellings Acquisition Act.

(3) In the period under review, there has been a steady increase in the population and it is anticipated that a more rapid increase will be the result of altered local conditions, consequent upon the construction of the Mersey Tunnel, the New Bromborough Docks, and the prosperity of Merseyside industries.

2. Overcrowding.

(1) Extent.—A rough index of the extent of overcrowding in the workers' dwellings is given by the findings of the Health Visitor, as recorded under the work of the Infant Welfare Department, page 65. Accepting as a standard of overcrowding the figure of more than two persons per room, an examination of the population of 426 houses situated in parts of the district other than the model settlements of Port Sunlight and Bromborough Pool, revealed 13.8 per cent. of the houses to be overcrowded. One street in Higher Bebington consisted of 18 houses and 55% were overcrowded ; one area with 48 houses showed 27% overcrowded.

(2) Causes.—The demand for labour in the industrial area and the failure of building to proceed fast enough to house the workers, are factors underlying the present state of affairs. High rents compelling sub-letting and accommodation of lodgers contribute to the trouble in a marked degree. It is difficult to combat the conclusion that at the present time what might be termed the normal dispersal of the family fails to occur at as early an age as in the past generation. Absence of dwellings may be part of the vicious circle whereby dispersal is prevented, but both young adult males and females undoubtedly cling more persistently to their parental homes than in former

times. Factory work proves more alluring to women than domestic service and enables them to dwell in their own homes (however close the quarters may be) and to contribute more to the family budget.

(3) Measures taken or contemplated for dealing with Overcrowding :—The Council has built and is building cottages. Facilities under the Small Dwellings Acquisition Act are provided. Private enterprise, on the part of individuals and industrial firms, contributes to the solution of the problem of how to house the people in a satisfactory way.

(4) Principal Cases of Overcrowding in 1925 :—There are 16 caravans in the area with a population in all of 55 persons—32 adults and 23 children. The largest number of persons in one van was eight—4 adults, 4 children. Twelve instances may be taken to exemplify local conditions which need rectification and have come before the Council in 1925.

1	2 bedrooms, Kitchen, Scullery	1 women (tenant) 2 adults (lodgers) 2 children
2	2 bedrooms, Kitchen and Scullery	1 adult male (tenant) 4 children 1 adult female 4 children.
3	2 bedrooms, Kitchen, Scullery	2 adults (tenant) 4 children 1 adult male 1 adult female
4	2 bedrooms, Kitchen and Scullery	2 adults 7 children
5	2 bedrooms (1 used as a living room)	2 adults 4 children 2 young adults
6	4 bedrooms Kitchen and Scullery, Parlour	9 adults (7 males, 2 females)

7	2 bedrooms Kitchen and Scullery	6 adults 4 children
8	2 bedrooms Kitchen and Scullery	5 adults 3 children
9	2 bedrooms Kitchen and Scullery	4 adults 6 children
10	4 bedrooms Kitchen and Scullery, Parlour	6 adults 7 children
11	2 bedrooms, Kitchen and Scullery	4 adults 8 children
12	2 bedrooms Kitchen and Scullery	2 adults 11 children

The occupants of one of the above houses have been provided with a Council house, but in the other instances all that could be done was to urge them to find other premises, and in certain cases to discontinue catering for lodgers.

3. General Standard of Housing in the Area.

(1) (*a*) The standard of housing desired by the people is a high one, for it is set by the dwellings in Port Sunlight and Bromborough Pool. The view of the late Viscount Leverhulme on the housing of his workers has been quoted in previous reports, but it may be worthy again to be reproduced :

> "My opinion is that the employer ought never to be in the position of landlord to the employee ; but if the employer has to choose between being in the position of landlord and the people being badly housed, then the lesser evil is for him to build suitable houses and be landlord ; but it is not the right relationship. If one has to choose between good homes built by the employer, with a high birth-rate and a low death-rate, and the objection of the employer being in the position of landlord, I think the lesser evil is that he should be in the position of landlord."

(*b*) General character of the defects found to exist in unfit houses.—Month by month long lists of defects which require to be remedied are presented to the Health Committee. Every conceivable form of defect, from simple dirtiness to almost irremediable dampness, has been reported, but the systematic and vigorous action of the local authority during the last few years is now exhibiting results commensurate with the difficulties of the undertaking. The defects in 2,304 houses, which were examined, showed a rough classification of over 4% dirty, 36% with defective roofs, ceilings, walls and floors, 16% defective drains and soil pipes, 29% defective w.c's. and yards, 12% dampness.

(*c*) How far defects are due to the lack of proper management and supervision by owners, or to acts of waste or neglect by tenants.—Difficulties are involved in the ascertainment of the answer to this question of so intricate a character that the proportion of blame cannot be allocated. From the tenants' point of view all defects are due to some neglect on the part of the owner ; from the owners' standpoint the tenants are always at fault ; and from the official viewpoint usually both are contributory.

(2) General action taken as regards unfit houses under—
(*a*) The Public Health Acts.
(*b*) The Housing Acts.

This action is set out in the table headed Housing Statistics for the year 1925.

Since the formation of the Urban District of Bebington and Bromborough in 1922, 1619 houses have been examined under the Public Health Acts, and 590 under Housing Acts. 27 houses were found unfit for human habitation and 1,031 were not in all respects reasonably fit for human habitation.

(3) The difficulties met with in remedying unfitness are on the whole due to lack of means on the part of owners. Any suggestion to carry out repairs gradually on an agreed arrangement is adopted by the Council. The Inspector meets owners,

agents or contractors who desire to interview him on housing matters and in 1925 these interviews were 171 in number.

(4) Statistics relative to water supply, closet accommodation, and refuse disposal are to be found in the table of Sanitary Work in the Area.

iv. Unhealthy areas, Nil.

v. Bye-laws relating to houses, and to tents, vans, sheds, etc. These are enforced and are satisfactory in their action.

vi. The Council has made systematic efforts to secure the disposal of household refuse so far as possible by burning, and circularises all householders twice a year to impress upon them the need for this economy.

Housing Statistics for the year 1925.

Number of new houses erected during the year :—

(*a*)	Total (including numbers given separately under (*b*)	359
(*b*)	With State assistance under the Housing Acts	
	(i.) By the Local Authority	40
	(ii.) By other bodies or persons	259

1. **Unfit Dwelling Houses.—**

Inspection—

(1)	Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts)	617
(2)	Number of dwelling houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910, or the Housing Consolidated Regulations, 1925	69

(3) Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation Nil.

(4) Number of dwelling houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation 543 P.H.A., 63 H.T.P.A.

2. **Remedy of Defects without Service of Formal Notice.—**

Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority or their Officers 446

3. **Action under Statutory Powers.—**

A. Proceedings under section 3 of the Housing Act, 1925.

(1) Number of dwelling houses in respect of which notices were served requiring repairs 37

(2) Number of dwelling houses which were rendered fit after service of formal notices :—

(*a*) By owners 35

(*b*) By Local Authority in default of owners ... 2

(3) Number of dwelling houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close ... Nil.

B. Proceedings under Public Health Acts.

(1) Number of dwelling houses in respect of which notices were served requiring defects to be remedied 107

(2) Number of dwelling houses in which defects were remedied after service of formal notices :—

(*a*) By owners 85

(*b*) By Local Authority in default of owners ... 7

C. Proceedings under sections 11, 14 and 15 of the Housing Act, 1925.

(1) Number of representations made with view to making Closing Orders	3
(2) Number of dwelling houses in respect of which Closing Orders were made	3
(3) Number of dwelling houses in respect of which Closing Orders were determined, the dwelling house having been rendered fit	Nil.
(4) Number of dwelling houses in respect of which Demolition Orders were made	Nil.
(5) Number of dwelling houses demolished in pursuance of Demolition Orders	Nil.

Inspection and Supervision of Food.

(*a*) Milk Supply. Most of the milk used in the area comes from the adjacent rural districts. Chemical analysis shows it to be almost all of an unadulterated character. 13 persons are registered as producers; 30 as purveyors, 7 of whom are in outside areas; and there are 23 milk shops. The Dairies, Cowsheds and Milkshops Orders are properly administered.

(*b*) Meat.—(i.) Arrangements for inspection at the time of slaughter permit an examination of all animals slaughtered within the district. Marking of meat has been sanctioned but no applications have been received. Condemned meat is destroyed at the refuse destructor.

(ii.) The 1924 Regulations are being carried out and no difficulty is experienced therewith.

(iii.) There are no public slaughter houses, but a considerable proportion of the meat used comes from the Birkenhead Abattoir and Lairages.

There are 17 butchers' shops, all of which are kept under inspection.

Private Slaughter Houses.

	In 1920	In January, 1925	In December, 1925
Registered	0	0	0
Licensed	3	4	4
Total	3	4	4

(*c*) Other Foods.—There are 17 bakehouses, one of which is an "underground bakehouse." All are sanitary and subjected to frequent inspection. There are eight fish shops and 11 fried fish premises—they are conducted in a cleanly fashion, but a few informal notices had to be served as the result of conditions found upon inspection.

(*d*) Food Poisoning.—No food poisoning is known to have occurred in 1925.

Sale of Food and Drugs Acts.

Particulars of Samples forwarded to the Public Analyst from the District during the year ending 31st December, 1925.

Name of Samples.	Number Analysed.	Number of Samples Certified as Adulterated or not up to Standard.
Butter	15	—
Cheese, Cheshire	3	1
Cheese, Gruyere	—	—
Cocoa	1	—
Cream	1	—
Cream, Preserved	—	—
Gregory's Powder	1	—
Lard	10	—
Liquorice Powder	1	—
Margarine	1	—
Milk	18	1
Milk, Condensed	1	—
Seidlitz Powder	1	—
Sweets (Gums)	2	—
Totals	55	2

Infectious Diseases Generally.

The prevalence of Infectious Disease of a notifiable character is shown in the following table which gives the case rate per 1,000 of the population 1921-1925.

Year.	Small Pox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Puerperal Fever.	Erysipelas.
1921	0.00	3.92	1.08	0.00	0.00	0.66
1922	0.00	3.72	0.56	0.15	0.10	0.61
1923	0.00	3.17	0.30	0.00	0.00	0.15
1924	0.10	1.60	0.10	0.10	0.10	0.34
1925	0.00	2.70	0.29	0.09	0.09	0.48

The corresponding rates for England and Wales are as follows :—

Year.	Small Pox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Puerperal Fever.	Erysipelas.
1921		3.64	1.76	0.10	0.06	0.35
1922		2.85	1.37	0.06	0.06	0.35
1923		2.24	1.05	0.08	0.06	0.32
1924		2.16	1.07	0.11	0.06	0.33
1925	0.14	2.36	1.23	0.07	0.06	0.39

Small Pox cases were two in number in the five years under review, and the source of infection was a visitor from an infected area in Lincolnshire. The patients were young unvaccinated children who recovered after a very mild attack.

Scarlet Fever and Diphtheria were most prevalent in 1921, 1922, 1923.

Notifiable Infectious Diseases, 1925.

Disease.	Total Cases Notified	Treated in Hospital	Total Deaths.
Small Pox	—	—	—
Scarlet Fever	56	52	2
Diphtheria	6	6	—
Enteric Fever (including Paratyphoid)	2	1	—
Pneumonia	29	6	11
Puerperal Fever	2	2	—
Cerebro Spinal Fever ...	—	—	—
Acute Poliomyelitis ...	1	—	—
Acute Polio-encephalitis ...	1	1	1
Encephalitis Lethargica ...	—	—	1
Erysipelas	10	3	—
Total - -	107	71	15

SCARLET FEVER. — In six households more than one member of the family was infected ; in one instance there was a return case.

Table of Age Groups, Showing Total Cases and Deaths, 1925.

Disease	Total Cases.	Total		0-1		1-2		2-3		3-4		4-5		5-10		10-15		15-20		20-35		35-45		45-65		65 up	
		M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Total Cases ...	107	57	50	...	...	1	2	1	1	3	4	2	5	20	17	6	5	6	2	7	2	3	2	5	7	3	3
Total Deaths ...	15	10	5	...	...	1	...	...	...	...	...	...	1	1	...	1	...	...	...	...	1	2	1	3	1	2	1
Small Pox Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever Cases	56	28	28	...	...	1	1	...	...	3	3	2	4	17	14	3	3	2	1	...	1	...	...	...	...	...	...
Deaths	2	1	1	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria Cases	6	2	4	...	...	...	...	...	1	...	...	...	...	...	1	1	2	1	...	...	...	...	...	...	...	...	...
Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever (in- Cases	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...
cluding P'typhoid) Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia Cases	29	21	8	...	...	1	...	...	...	...	...	...	1	3	2	2	...	2	...	6	...	2	...	3	3	3	1
Deaths	11	8	3	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	2	1	3	1	2	1
Puerperal Fever Cases	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...
Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Poliomye- Cases	1	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
litis Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Polio- Cases	1	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
encephalitis Deaths	1	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lethargica Deaths	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
Erysipelas Cases	10	3	7	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	...	...	...	...	2	4	...	2
Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Table of Age-Groups showing Total Cases and Deaths, 1921-1925.

Disease.		Total Cases	Total		0-1		1-2		2-3		3-4		4-5		5-10		10-15		15-20		20-35		35-45		45-65		65 up	
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Total Cases		612	329	283	4	2	9	13	8	6	14	13	16	18	109	97	50	49	28	19	35	23	23	19	23	18	10	6
Total Deaths		75	49	26	3	2	4	9	3	...	3	1	1	2	6	...	3	...	...	...	4	4	7	3	11	3	4	2
Small Pox	Cases	2	...	2	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	Cases	302	157	145	...	...	4	5	6	4	9	5	12	13	67	63	39	31	12	9	7	10	1	4	...	1	...	...
	Deaths	3	1	2	...	...	...	...	...	...	...	...	...	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria	Cases	47	20	27	1	...	...	2	...	1	1	1	1	1	11	4	3	10	3	4	...	2	...	2	...	...	...	...
	Deaths	8	6	2	1	...	...	2	...	...	...	...	...	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever (including paratyphoid)	Cases	6	4	2	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	2	...	1	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia	Cases	123	91	32	2	1	2	3	1	...	2	2	...	1	7	4	6	3	11	1	26	3	17	5	12	6	5	3
	Deaths	55	38	17	2	2	2	6	3	...	2	1	1	...	...	...	3	...	...	...	4	2	6	1	11	3	4	2
Puerperal Fever	Cases	6	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	3	...	...	...	...
	Deaths	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...
Cerebro Spinal Fever	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Poliomyelitis	Cases	1	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Polio-encephalitis	Cases	4	3	1	...	...	2	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	4	3	1	...	...	2	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica	Cases	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...
	Deaths	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
Dysentery	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Ersyipelas	Cases	45	20	25	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	3	1	2	3	5	10	11	5	3
	Deaths	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...
Malaria	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chicken Pox	Cases	74	34	40	1	1	1	2	1	1	1	4	3	3	24	25	2	2	1	...	...	2	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Table Showing Distribution of Total Cases of Notifiable Diseases, 1925.

Diseases.	District.			Total Cases.
	Bromborough	Higher Bebington.	Lower Bebington.	
Smallpox	—	—	—	—
Diphtheria	0	1	5	6
Scarlet Fever	13	3	40	56
Enteric Fever	1	—	1	2
Pneumonia	11	2	16	29
Erysipelas	2	2	6	10
Puerperal Fever	—	1	1	2
Polio-Encephalitis	—	—	1	1
Cerebro Spinal Meningitis ...	—	—	—	—
Poliomyelitis	—	1	—	1
Pulmonary Tuberculosis ...	6	3	14	23
Non-Pulmonary Tuberculosis	1	0	8	9
Totals	34	13	92	139

Tuberculosis 1925.

Age Periods	NEW CASES.				DEATHS.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
Years								
0	—	—	—	1	—	—	—	1
1	—	—	3	1	—	—	2	—
5	1	—	—	1	—	—	—	—
10	—	—	—	—	—	—	—	—
15	2	—	—	—	—	—	—	—
20	4	4	—	1	2	4	—	—
25	—	7	1	—	3	2	—	—
35	—	1	—	1	—	1	—	1
45	2	1	—	—	1	1	—	—
55	1	—	—	—	—	—	—	—
65 and upwards ...	—	—	—	—	—	—	—	—
Totals ...	10	13	4	5	6	8	2	2

With one exception (a case of tuberculous meningitis), notification was received of all the cases in which death occurred in 1925. Practitioners who certify patients to have died from tuberculosis are written to if notification has not been made. In two instances of 'other tuberculosis' notification was received after the death of the patients. Notification of the pulmonary

cases was received within one month or less of the death in five instances. The periods elapsing between notification and death were five years ; two years and three months ; eight months in two instances ; five months in two instances ; four months ; three months ; two months.

No action has been taken under the Public Health (Prevention of Tuberculosis) Regulations, 1925, nor under section 62 of the Public Health Act, 1925.

Maternity and Child Welfare.

To deal with maternity and child welfare, the Council has provided three centres which are situated close to the denser aggregations of the population. Expectant and nursing mothers, and children under five years of age, attend, in large numbers, at the centres. In five years (1921-1925) the Health visitor has paid 11,637 visits to homes where births have occurred, and 61,339 attendances of mothers and infants have been recorded. The centres are purely consultative (the Medical Officer attending for consultations) and educational, but in 1924, the establishment of the orthopædic clinic introduced the practice of treatment by skilled manipulation. Expectant mothers may have assistance in payment of fees at maternity homes ; and the Convalescent Institution at West Kirby is frequently made use of for sick children. Maternal deaths in the five years under review were 8 in number. Maternal deaths, stillbirths and infant deaths are investigated by the Health Visitor. A regular ante-natal clinic has been established and 28 expectant mothers have sought special advice since its inauguration a few months ago. At this clinic encouragement is given to midwives to be present at consultations with their patients. At the monthly meetings of the Committee concerned with Maternity and Child Welfare, lists are presented detailing the circumstances of persons, members of the Welfare Centres who have applied for, or have been found to require milk or food. A system of Home Help for women during confinement has been in operation for part of 1925, and the number of applications received for the services of the help suggests that this was a much needed innovation. The Council was one of the pioneer authorities so far as Cheshire is

concerned in the introduction of an orthopædic clinic for children under five years of age. Orthopædic work is presided over by the Chief Medical Officer to the Leasowe Open-Air Hospital for Children, and his trained orthopædic nurses carry out the after care. Twenty-three patients have been, or are under treatment, since the inception of the work in 1925. There is a voluntary society which co-operates with the Council's scheme and undertakes to provide maternity outfits, etc., which the recipients cannot provide for themselves. On the whole, it may be claimed that there is an approximation to the complete maternity scheme which the Chief Medical Officer of the Ministry advocates " as a wise policy which should be made applicable in every district." This complete maternity scheme involves—

a An adequate medical midwifery and nursing service.
b The satisfactory and sufficient nutrition of the mother.
c Maternity centres and ante-natal supervision.
d Maternity homes and hospital accommodation.
e Domestic aid before, at the time of, and after childbirth.
f Maternity benefit and other financial aid in certain cases.
g Notification of births and stillbirths.

In 1925 the Health Visitor paid 2,437 visits and there were 11,481 attendances at the centres. On her visits to new infants in 234 homes (four and five rooms), she found two families living in 106 ; 3 families in 13 ; four families in 1 ; and one family of six persons in a one-roomed caravan. Where one family only occupied the house there was overcrowding in 13 cases, and in several instances proper separation of the sexes could not be arranged. She reports no improvement over 1924 conditions.

1925.

	Cases.						
	Notified.	Treated.		Vision unimpaired.	Vision impaired.	Total Blindness.	Death.
		At Home.	In Hospital.				
OPHTHALMIA NEONATORUM.	2	2	Nil.	2	Nil.	Nil.	Nil

1921—1925.

17	13	4	16	1	Nil	Nil

Ellesmere Port and Whitby Urban Council.

1. General Statistics.

Area (acres)	3,449
Population (1921)	13,063
Population Estimated (1925)	15,000
Number of inhabited houses (1921)	2,290
Number of families or separate occupiers (1921) ...	2,605
Rateable value	£79,075
Sum represented by a penny rate	£265

Social Conditions and Chief Occupations

(as shewn in the Census of 1921).

Occupation.	Males.	Females.
Total Population	6,827	6,236
Aged 0-11	1,958	1,884
Aged 12 and upwards	4,869	4,352
I. Fishermen	3	0
II. Agricultural Occupations	106	5
III. Mining and Quarrying Occupations	1	0
IV. Makers of Coke, Lime, Cement, etc.	57	4
V. Makers of Bricks, Pottery, Glass	12	0
VI. Workers, in Chemicals, Paints, etc.	47	18
VII. Metal Workers	1,294	15
VIII. Workers in Precious Metals	1	0
IX. Electrical Apparatus Makers, Fitters, etc. ...	44	130
X. Makers of Watches, etc.	5	0
XI. Workers in Skins ; Leather Goods Makers ...	0	0
XII. Textile Workers	1	3
XIII. Makers of Textile Goods and Articles of Dress	37	59
XIV. Makers of Foods, Drinks and Tobacco ...	151	23
XV. Workers in Wood, etc.	171	1
XVI. Paper Workers ; Printers, etc.	6	2
XVII. Builders, Bricklayers, etc.	184	2
XVIII. Painters and Decorators	39	1
XIX. Workers in other Materials	0	6
XX. Workers in Mixed and Undefined Materials ...	58	0
XXI. Persons in Gas, Water, Electricity Supply ...	9	0
XXII. Transport Workers	481	12
XXIII. Commercial and Financial Occupations ...	192	152
XXIV. Public Administration and Defence	35	10
XXV. Professional Occupations	44	57
XXVI. Persons Employed in Entertainments, etc. ...	6	3
XXVII. Persons Employed in Personal Service ...	55	241
XXVIII. Clerks, Draughtsmen, Typists, etc.	124	68
XXIX. Warehousemen, etc.	116	32
XXX. Stationary Engine Drivers, etc.	179	0
XXXI. All other occupations	860	40
Total Occupied	4,318	884
XXXII. Unoccupied and Retired	551	3,468
Total Occupied and Unoccupied	4,869	4,352

The figures in the above table include :—

	Males.
Agricultural Labourers	67
Chemical Workers	41
Furnacemen and Puddlers	25
Rollers (metal)	116
Boiler Makers and their Labourers	57
Galvanisers	33
Picklers (metal)	97
Grain Millers	63
Ship Builders	55
Bargemen	112
	Females.
Domestic Servants	139

The presence of any occupation which exercises a harmful influence on the health of those who pursue it, was not reflected in any of the returns which came before the Medical Officer. Factories and mills are large, airy and of modern construction, and so serve to minimise the incidence of industrial disease. Moreover, the town is so young that it has retained " the sunlight, the open air conditions, the colour and the rural associations," which the older industrial towns have lost. The number of women engaged in the making of electrical apparatus is accounted for by the electric cable works in the neighbouring district of Helsby. The presence of 112 bargemen in the census population (and the Inspector's report detailing an examination of 98 boats with a population of 215 adults and 136 children), occasions special interest in a paper by the Manchester Port Medical Officer on " The Unhealthy Bargee." He points out that in the bargees' occupation there is no separation between occupational conditions and housing. He writes as follows :—

> " The occupation is that of bargee, or lighterman—a class of worker who with remarkably few exceptions, is compelled to live as well as work on his barge, flat, or lighter. This is an open-air occupation with no lack of muscular exercise, and although at times it subjects the bargee to severe weather exposure, such occasions are irregular and rarely prolonged to any excessive extent. Another favourable point is that it is most unusual, except on inland waterways, to move the boats except during daylight. So far as the work itself is concerned, therefore, one would undoubtedly expect it to be particularly health-

ful, and I have personally no doubt of this being the case. As an occupation, however, that of bargeman is not at all healthful; and the reason for this apparent contradiction must be assigned to the disgracefully insanitary quarters provided for the bargee's moments of rest and leisure."

There seems to be general agreement which is shared by the majority of barge people that children should cease to be carried in the close quarters necessitated by the small size of the boats.

The natural increase (that is excess of births over deaths) is shown in the following table :—

Year.	Population	Natural Increase per 1,000 population.
1921	13,350	21.5
1922	13,540	14.2
1923	13,900	19.5
1924	14,370	17.6
1925	15,000	15.2

2. Extracts from Vital Statistics of the Year 1925.

These statistics are calculated on the population of 15,000 supplied by the Registrar General. This figure represents an increase of 630 since the previous report.

Births.

	Total.	Males.	Females.
Legitimate ...	376	197	179
Illegitimate ...	14	6	8
	390	203	187

Birth Rate (R.G.) 26.

The average number of births per annum in the years 1920-1924 was 405.

Table of number of Births and Birth Rates 1920-1924.

Year.	Number.	Birth Rate.
1920	465	33.4
1921	398	29.8
1922	368	27.1
1923	409	29.4
1924	389	27.0

Deaths.

Total, 163 ... Males, 84 ... Females, 79
Death Rate (R.G.) 10.8. The standardised Death Rate was 12.2.

Table of Number of Deaths and Death Rates, 1920-1924.

Year.	Number.	Death Rate.
1920	138	9.9
1921	111	8.3
1922	176	12.9
1923	137	9.8
1924	136	9.5

25.1% of the deaths were in the age periods 65 years and over.

The average number of deaths per annum in the years 1920-1924 was 139.

Number of women dying in, or in consequence of—

Childbirth	(from Sepsis)	1
,,	(from other causes)	2

Deaths of Infants under one year of age per 1,000 births. 128. Legitimate 46. Illegitimate 4. Total 50.

Table of Infantile Mortality, 1920-1924.

Year.	Rate per 1,000 Births.
1920	66
1921	77.9
1922	116.8
1923	66
1924	64.2

Infantile Mortality was considerably higher than the average last year, and from the above table it will be seen that a like criticism can be applied to 1922. In 1925, fifty infants died before attaining the age of one year. Three main factors are said to be contributory to the infantile death-rate, viz.: "the first, the shock of birth ; the second, the instability of the nervous, digestive, and circulatory systems of the young child ;

the third, the presence or absence of infection." The statement quoted is from "The use of death-rates as a measure of hygienic conditions," and the following is from the same work.

The four most important of the causes of death in the groups of disease in which the mortality decreases from birth and upwards are "premature birth, atrophy, debility and marasmus, congenital malformations and convulsions. These causes account for the specially high mortality immediately after birth and for a considerably though decreasing mortality till the end of the first year." An examination is made of statistics derived from urban and rural populations and the conclusion is arrived at that.—"It seems quite definite that there is a group of diseases which apparently kill quite independently of the environment either of the child or the mother" The third contributory factor is the group of diseases due to the presence or absence of infection and "it is this group of diseases which sanitation should attack with immediate effect." An attempt has been made to analyse the certified causes of the 50 deaths of infants under one year to determine the part played by each factor with the following result :—

Age.	Deaths.	Classification of Certified Causes.
Under 1 month...	22 ...	8 Prematurity
		5 Congenital debility
		3 Malformations
		5 Definite infections
		2 Pemphigus neonatorum
		2 Pneumonia
		1 Whooping cough
		1 Bronchitis
1—3 months ...	8 ...	1 Malformation
		5 Definite infections
		1 Pemphigus neonatorum
		2 Syphilis
		2 Pneumonia
		1 Rickets
		1 Bronchitis

Ages.	Deaths.	Classification of Certified Causes.
3—6 months ...	9 ...	1 Prematurity
		7 Definite infections
		2 Pneumonia
		2 Gastro-enteritis
		1 Syphilis
		1 Septicaemia
		1 Mastoid disease
		1 Bronchitis
6—12 months ...	11 ...	1 Marasmus
		5 Definite infections
		3 Pneumonia
		1 Whooping Cough
		1 Infective enteritis
		1 Gastritis
		3 Bronchitis
		1 Intussusception

Nineteen of the fifty deaths fall into the first group, viz. : that group which is independent of environment ; 22 are infections, 6 are bronchitis, and as whooping cough was rampant, at least some of the six were probably associated with that infectious disease. Rickets is due to faulty environment and dietetic errors. Gastritis is commonly due to similar mistakes and the remaining cause of a death, viz., intussusception indicates the instability of the digestive system of infants.

" The maximum effect of bad environment in depressing health is between the ages of two and three years," examining this proposition and accepting it as true, the local conditions appear as follows.

Ages.	Deaths.	Classification of Certified Causes.
1—2 years ...	11 ...	7 Definite Infectious
		3 Whooping cough
		2 Tuberculosis
		1 Pneumonia
		1 Meningitis
		1 Rickets
		1 Convulsions due to teething
		2 Bronchitis

Ages.	Deaths.	Classification of Certified Causes.
2—5 years ...	6 ...	2 Accident
		4 Definite infections
		1 Diphtheria
		1 Influenza
		1 Whooping cough
		1 Ulcerative colitis

The total number of deaths under 5 years of age was 67, and 33 of them were due to definite infectious conditions. The whooping cough outbreak was widespread throughout the town but the lesson which is taught with unwearying reiteration at the Welfare Centre, viz., that whooping cough is a serious and often fatal disease has not been learned—" its only a touch of the whooping cough " is still heard among the mothers. The pemphigus outbreak was dealt with promptly, otherwise the fatalities would have been more numerous, for memory of this condition and its fatal results appeared to be completely wanting. Putting aside failures to apprehend the danger present in certain diseases (which occurred in 1925), it must be concluded that the environmental factor, *i.e.*, the factor, the results of which can be removed by sanitation predominated in the production of the infantile mortality rate of 128 per 1,000 in 1925, and 116 in 1922, when infections of epidemic type were rife. Limited housing provides unlimited scope for the spread of infection amongst a population whose health standard it has lowered, and the Council's scheme under which a large amount of work has been done, calls urgently for its continued and intense prosecution if the infantile mortality rate is to be lowered.

Deaths from Measles (all ages)	Nil
Deaths from Whooping Cough (all ages)	7
Deaths from Diarrhœa (under 2 years of age) ...	4

The deaths from Measles in the preceding five years numbered 11, from Whooping Cough 29, and from Diarrhœa (under 2 years) 16, in the same period.

Causes of Death.

All Causes.		Males.	Females.
1.	Enteric Fever	0	0
2.	Small Pox	0	0
3.	Measles	0	0
4.	Scarlet Fever	0	0
5.	Whooping Cough	4	3
6.	Diphtheria	0	3
7.	Influenza	1	1
8.	Encephalitis Lethargica	0	0
9.	Meningococcal Meningitis	0	0
10.	Tuberculosis of Respiratory System	3	2
11.	Other Tuberculous Diseases	2	1
12.	Cancer, Malignant Disease	5	8
13.	Rheumatic Fever	1	1
14.	Diabetes	0	0
15.	Cerebral Hæmorrhage, &c.	2	4
16.	Heart Disease	3	9
17.	Arterio Sclerosis	4	3
18.	Bronchitis	7	10
19.	Pneumonia (All forms)	11	8
20.	Other Respiratory Diseases	1	2
21.	Ulcer of the Stomach or Duodenum	0	0
22.	Diarrhœa, &c. (under 2 years)	3	1
23.	Appendicitis and Typhlitis	1	0
24.	Cirrhosis of Liver	0	0
25.	Acute and Chronic Nephritis	4	1
26.	Puerperal Sepsis	0	1
27.	Other Accidents and Diseases of Pregnancy and Parturition	0	2
28.	Congenital Debility and Malformation, Premature Birth	10	7
29.	Suicide	1	0
30.	Other Deaths from Violence	5	2
31.	Other Defined Diseases	16	10
32.	Causes Ill-defined or Unknown	0	0
	Totals - -	84	79

General Provision of Health Services in the Area.

Hospitals provided or subsidised by the Local Authority or by the County Council.

1. Tuberculosis.—See under North West Cheshire, page 23.

2. Maternity.—There is no maternity hospital, but recently a special ward of the Cottage Hospital has been erected for midwifery. In the event of an ante-natal clinic being established by the Council when the Infant Welfare Centre has been

built, it should be sought to co-operate with the Hospital Committee.

3. CHILDREN.—The Local Authority subscribes to the Cottage Hospital so that it is available for children under school age referred from the Infant Welfare Clinic. A bed is available in the West Kirby Convalescent Home in return for a grant made by the Council, and by a similar arrangement an orthopædic bed is retained when required at the Leasowe Children's Hospital.

4. FEVER.—Wirral Hospital, see page 23.

5. SMALL POX.—See page 24.

6. OTHER.—Extensive use is made of the Infirmary of the Poor Law Authority at Clatterbridge, Chester Royal Infirmary and Liverpool Hospitals.

AMBULANCE FACILITIES.—

(*a*) For Infectious Cases.—The Wirral Joint Hospital Board sends a motor Ambulance to remove Infectious Cases to its hospitals.

(*b*) For Non-Infectious Cases and Accident Cases.—There is a Local Ambulance.

CLINICS AND TREATMENT CENTRES.—

Name and Situation.	Nature of Accommodation.	By whom provided.
Maternity and Child Welfare Centre, Station Road, Ellesmere Port.	Consulting Room, Weighing Room, Assembly Room. The Centre has outgrown the accommodation.	Urban District Council.
Orthopædic Clinic, at Maternity Centre.	Consultation and Treatment	do.
Day Nurseries (Nil)		
School Clinic	Dentistry only.	County Council.
Tuberculosis Dispensary Victoria Road.	Consulting and Assembly Room.	County Council.
Treatment Centres for Venereal Disease (Nil)	Arrangements made with hospitals	County Council.

PUBLIC HEALTH STAFF.—

The Inspector has the qualification of the Royal Sanitary Institute, and in addition is specially qualified in Meat Inspection. He is assisted by a man engaged in disinfecting. The Health Visitor has full time employment in Infant Welfare Work. She has the Health Visitors' Certificate, the Certificate of the Central Midwives' Board, and the Certificate of Proficiency in Sanitary Work. Contribution is made to the salaries of the Medical Officer of Health and the Sanitary Inspector.

PROFESSIONAL NURSING IN THE HOME.—

(*a*) General. Nil.

(*b*) Infectious Diseases. Nil.

No nursing is provided either by the County Council or the Sanitary Authority, with the exception of the attentions of a trained orthopædic nurse from the Leasowe Children's Hospital, employed at the cost of the Local Authority with payments by the recipients where they can afford it. One of the iron works employs a trained nurse among its workers. There is no co-ordination of schemes for nursing any sections of the community.

MIDWIVES.—The Sanitary Authority does not employ nor subsidise any midwives. There are nine midwives practising in the District, eight of whom are certificated by the Central Midwives' Board.

CHEMICAL WORK.—The County Analyst receives and examines samples from the area at the expense of the County Council. The only samples sent by the Local Authority are waters ; food samples are taken by the County Council Inspectors.

List of Adoptive Acts, Bye-Laws and Regulations.

ADOPTIVE ACTS.

Ellesmere Port and Whitby Urban District Council Act, 1914	Adopted
Baths and Wash-houses Acts, 1846-1899	1907
Infectious Diseases (Prevention) Act, 1890	1902
Private Street Works Act, 1892	1902
Open Spaces Act, 1906	——

	Adopted
Public Health Acts Amendment Act, 1890 (Parts 2, 3, 4 & 6)	1902
Public Health Acts Amendment Act, 1907 (Parts 2, 3, 4 & 6)	1909
Public Libraries Act, 1892	1907
Notification of Births Act, 1907	1914
Small Dwellings Acquisition Acts, 1899 & 1919 ...	1920

BYE-LAWS.

With respect to—	
New Streets and Buildings	1926
Pleasure Grounds (Victoria Gardens)	1903
Nuisances	1903
Common Lodging Houses	1903
Slaughter-houses	1903
Omnibuses	1913
Cemetery	1914
Houses Let in Lodgings	1914
Tents, Vans, Sheds	1921
Market	1921

REGULATIONS AND ORDERS.

Dairies, Cowsheds and Milkshops	1903
Order declaring Certain Trades to be Offensive Trades within the District	1911

Sanitary Circumstances of the Area.

WATER.—The whole area has a plentiful supply of water of excellent quality. The supply is constant and practically the entire population has water laid on to the dwelling houses. One row of 15 houses is supplied from 3 standpipes, and there is one standpipe for another group of 5 houses. One farmhouse and its three adjacent cottages are dependent upon a well provided with a pump. A recent analysis of a sample of this water is certified by the analyst as of satisfactory quality for domestic use, but he comments upon the hardness which amounts to over 30 degrees, of which over 4 degrees are permanent and 26 are temporary. On Stanlow Point, which is now

an island owing to the cutting of the Manchester Ship Canal, there are five cottages supplied from West Cheshire water, but the supply has to be carried several hundred yards.

The general supply is under the control of the West Cheshire Water Board (see page 26), and in Whitby at the highest part of the Urban District, a water tower with a capacity of 200,000 gallons has been provided. In this rapidly growing district, extensions of water mains will be required to keep pace with the housing developments.

Rivers and Streams.—The small river, the Gowy (gwy-water) forms the eastern border of the Urban District and flows through fenny land to be syphoned below the Manchester Ship Canal into the Mersey. It is said to receive house drainage nearer its source than Ellesmere Port, but no complaint of this has ever been received. Agricultural ditches and water courses are apt to become obstructed, and the necessity for clearing these may be overlooked in the attention directed to the main industrial developments of the area.

Drainage and Sewerage.—There is an adequate water carriage system and series of sewers. Extensions of sewers commensurate with the town's growth have been carried out, but the disposal works, by means of filter beds, were constructed for an area very much smaller than the present town. In 1920 an engineering expert advised upon disposal requirements, but apart from new filtering material, the works remained unaltered. The growth of Ellesmere Port necessitates a modern disposal plant.

Closet Accommodation.—All the houses in the Central Area of the town are provided with water closets. Scattered houses abutting on the rural districts have pail closets to the number of 26, and there are 15 privy middens.

Scavenging.—The Council employs its own staff for scavenging and there are no complaints of a failure to carry out, or of perfunctory performance of, this duty. The cost of the work is about £20 per week. Trade and stable refuse is dealt with by the owners. Storage of refuse in all the newer properties is in galvanised iron bins. There are 135 fixed ashpits, and

2,496 movable receptacles of which 2,480 are bins. There is one tip situated on land excavated by brick works and about 70 yards from houses. Owing to the urbanisation of the area, there is increasing difficulty in obtaining suitable land on which to tip refuse without causing nuisance.

SANITARY INSPECTION OF THE AREA.—The subjoined table gives a classified statement of the number of premises visited, the defects or nuisances discovered, and the action and result of action taken in regard to these.

Annual Tabular Statement of Inspections, and the Result of Service Notices, for the Year ended 31st December, 1925.

Inspections of Premises, etc.	Number.	Number of Notices Served		Result of Service o Notices.		
		Statutory.	Informed.	Complied with.	Remaining in Hand.	Prosecut
Dwelling houses (total)	313	41	57	82	16	—
Schools	7	—	—	—	—	—
Caravans and Temporary Buildings ...	45	19	—	7	7	Five Ca
Back Passages	62	—	—	—	—	fines, 1
Privy Middens	3	—	3	3	—	each.
New Drainage Inspections	172	—	—	—	—	—
Drainage Reconstructions	5	—	—	—	—	—
Drainage Repairs	11	—	—	—	—	—

Smoke Abatement.—No local readings of atmospheric impurity are taken.

Premises and Occupations which can be Controlled by Bye-Laws or Regulations.—There are no houses let in lodgings, and 10 fish-frying premises constitute the only trades to which the term offensive might be applied.

Schools.—There are 7 public elementary schools, and one private school for infants. All are provided with West Cheshire water, and all except one have dust bins. The exception is a school with a fixed ashpit. In two schools the sanitary conveniences are trough closets with automatic flushing apparatus. In the others there are closets of the pedestal wash-down type.

Housing.

1. General Housing Conditions in the Area.

(1) General Housing Conditions.—Housing is good, the great majority of the dwellings are of quite recent construction.

Seventy years ago, a local historian wrote :—

> "A few years since, there were on the site of this commodious and flourishing little town, only one public house, three small cottages, a mere shed as a substitute for a warehouse, and one set of locks ; now it has about two hundred houses, many of them of neat aspect and commodious interior, a church, several schools, a splendid and most ample range of warehouses, erected on arches by which branches of the canal are brought under them, and above all a magnificent floating dock containing upwards of sixty thousand yards of water space."

> Twenty years earlier, " Ellesmere Port was a little pleasure resort containing only the hotel and bathing house and six small cottages. There was no church and the residents used to go to Stoak church in a barge towed by donkeys."

These two extracts are revelant to the general condition of housing, for there are no cottages of any great age as there are in so many of the Wirral townships. The growth of the

town came with the Manchester Ship Canal, and the establishment of industries. Development was in the form of long streets of houses identical in appearance, but now monotony is lessened by the building of houses in pairs with varying elevations. Cottages which fail to comply with most modern requirements, in the central parts of the town, could be counted on the fingers of one hand.

(2) (*a*) Extent of Shortage or Excess of Houses.—While general housing conditions are good, there is a marked deficiency in the number of houses. An examination during the last two years of 379 houses, showed that 108 were occupied by more than one family. In addition, young adult male lodgers are numerous. Deficiency in the number of houses is shown by the exodus of workers by train, motor bus, and bicycle to their dwellings in Wirral villages and the City of Chester. At the 1921 Census 45.7 per cent. of the population lived in 5 roomed houses, and this was the same percentage as at the 1911 Census ; only 1.7 per cent. lived in houses of 8 or more rooms ; in 1911, 2.4 per cent. were in houses of this size.

(*b*) Measures taken or contemplated to meet any Shortage.—The Council has completed 419 houses and has 144 in course of erection. The Wolverhampton Corrugated Iron Company has built for the accommodation of a number of its employees. The Small Dwellings Acquisition Act is in operation and 117 applications have been granted in the last five years.

(3) Information as to any important changes in population during the period under review or anticipated in the future.—Within the last five years there have been intervals of depression in certain industries accompanied by considerable fluctuations in population affecting for the most part the lodger section. It is anticipated that a large influx of labourers will take place during the construction of a new dock, railways, and roads, by the Manchester Ship Canal Company. This work has begun and it is stated that it will cost £250,000. Considerable stretches of land on the banks of the Ship Canal are available for factories and their occupation depends upon a new industrial wave.

2. Overcrowding.

(1) Extent.—Many of the points in connection with this subject have of necessity been dealt with in the foregoing paragraph. Only .87 of a room was available for each person at the time of the Census when local industries were not flourishing, and this was the lowest average of the number of rooms per person in the Urban Districts of Wirral. No reliable figure of overcrowding can be given at the present time, but from the number of persons who apply to the Health Department with statements that their whole families have to be accommodated in single rooms, it must be inferred that grave overcrowding is rampant.

(2) Causes.—The rapid growth of the town, which is only just catching up its conversion from a country hamlet on the establishment of industries, is the primary cause. The nature of employment at iron works whereby occupation is found for young men, accounts for the lodger population which crowds the houses.

(3) Measures Taken or Contemplated for Dealing with Overcrowding.—The Council steadily pursues a policy of building cottages, and owing to the demand there can be no reduction in the number to be erected.

The Council has been deliberating on a proposition to acquire certain land with the object of erecting 1,300 houses.

(4) Principal Cases of Overcrowding during the Year 1925, and Action Taken.—To detail the principle cases of overcrowding would be to edit a series of most pathetic stories of the conditions under which families, often with sickness induced by these conditions, have to exist. The action taken has been to consider in the allocation of the new houses the whole of the circumstances of the applicants with a view to relieve the most urgent cases. With no available houses in the town, and a similar state of affairs in all the surrounding villages, no summary action can be taken.

The following were the conditions of some of the persons who have now obtained Council houses.

1. 2 adults 5 children living and sleeping in one room
2. 2 ,, 7 ,, ,, ,, ,,
3. 2 ,, 4 ,, ,, ,, ,,
4. 2 ,, 2 ,, ,, ,, ,,
5. 2 ,, 2 ,, ,, ,, ,,
6. 2 ,, 2 ,, ,, ,, ,,
7. 2 ,, 2 ,, ,, ,, ,,

Three other families each consisting of 2 adults and 4 children in occupation of single rooms are awaiting increased accommodation.

3. Fitness of Houses.

(1) (*a*) General Standard of Housing in the Area.—This may be gathered from the following tables.

Tables of Housing Accommodation.

Accommodation.	At end of 1924	Completed in 1925.
Living Room, Scullery, and two Bedrooms	170	—
Living Room, Scullery and three Bedrooms	695	136
Parlour, Living Room, Scullery and two Bedrooms ...	184	—
Parlour, Living Room, Scullery and three Bedrooms	1,377	111
Parlour, Living Room, Scullery and four Bedrooms ...	152	—
Larger Houses	32	4
	2,610	251
Add for 1925	251	
Total at end of 1925	2,861	

Nine houses which consisted of parlour, living room, scullery, and three bedrooms, have been converted into houses and shops, so that the corrected figures now are :—

Accommodation.	At end of 1925.
Living Room, Scullery and two Bedrooms	170
Living Room, Scullery and three Bedrooms	840
Parlour, Living Room, Scullery and two Bedrooms	184
Parlour, Living Room, Scullery and three Bedrooms	1,479
Parlour, Living Room, Scullery and four Bedrooms	152
Larger Houses	36
Total at end of 1925	2,861

(*b*) General character of the defects found to exist in unfit houses ; this is shown by the Inspector's table of work in 1925 and year by year similar defects have to be remedied.

Nature of Defects.	No.
Filthy Houses or parts thereof cleansed	64
Dilapidations to houses remedied	83
Defective Privy Middens converted to Water Closets	3
Houses supplied with water	3
Defective Drains, reconstructed or repaired	20
Choked Drains released and cleansed	16
Broken W.C. Pans renewed	15
Defective W.C. Fittings repaired	36
Defective W.C. Flushing Cisterns repaired or renewed	17
Insanitary Sink Stone renewed	1
Defective Sink and Bath Waste Pipes repaired	16
Defective Roofs repaired	56
Defective or choked Rain Water Spoutings remedied	55
Dilapidated Dust Bins renewed	88
Defective Ashpits Repaired	5
Defective Ashpits abolished, and Dust Bins provided	3
Accumulation of Refuse removed	1
Improper keeping of Animals altered	2
Defective Yard Pavings relaid	39
Defective Washing Boilers made good	42
Broken Floor Boards renewed	14

(*c*) How far defects are due to the lack of proper management and supervision by owners, or to acts of waste or neglect by tenants.—Owners of groups of cottages hand over the management thereof to agents, who in many instances have little or no authority to do repairs, with the result that a formidable aggregation of defects appears on the list when the houses are examined. An increase in the number of owner occupiers will remedy defects arising from want of supervision. Tenants vary from the individual who will not do a hand's turn to prevent a defect arising, or increasing, to the man who takes a pride in his cottage even if it is the property of another. Lack of cleanliness, not infrequently, is present in the type of cottage which owing to increasing dilapidation cannot be kept clean and neglect by the tenant is the result of incapacity to cope with accumulating decay.

(2) General Action Taken as regards Unfit Houses under—

(*a*) The Public Health Acts ; in the period under review, 1,477 houses were dealt with by the owners as the result of action taken by the Sanitary Authority.

(*b*) The Housing Acts.—In the same period 26 houses were repaired, in 3 cases by the local Authority, and in the remainder by the owners.

(3) Difficulties Found in Remedying Unfitness.—

There are no difficulties beyond those arising from absence of funds on the part of owners, and reluctance to repair beyond the absolute minimum. The question of back to back houses does not arise.

(4) Water Supply, Closet Accommodation and Refuse Disposal.—

Statistics are supplied for 1925 in the table given under 1 *b*. Fitness of Houses :

4. Unhealthy Areas.—Are non-existent.

5. Byelaws relating to Houses, to Houses let in Lodgings, and to Tents, Vans, Sheds, etc.

(1) As to working of existing byelaws.—No difficulties have been encountered.

(2) As to need for new byelaws or revision of existing byelaws. Byelaws with respect to new streets and buildings have been revised and brought into operation in 1926.

6. General and Miscellaneous.

Ellesmere Port has had to deal with the nuisance which invariably arises from the attempt of a non-migrant community to live in vans, or perhaps it would be better expressed from the effort of persons accustomed to civilised amenities to form a caravan colony. Eight of these vans had a population of 33 persons—18 adults and 15 children. Water supply, privy accommodation, dust bin, were all wanting in the first instance,

but gradually, by the force of 19 statutory notices, police court proceedings and fines, something has been accomplished in the direction of improving the amenities of these dwellings. The total number of van dwellings in the district is now eleven.

Housing Statistics for the year 1925.

Number of new houses erected during the year :—

(*a*) Total including numbers given separately under (*b*)	251
(*b*) With State assistance under the Housing Acts	
(i.) By the Local Authority	170
(ii.) By other bodies or persons	60

1. **Unfit Dwelling Houses.—**

Inspection—

(1) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts)	313
(2) Number of dwelling houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910, or the Housing Consolidated Regulations, 1925 ...	113
(3) Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	Nil
(4) Number of dwelling houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	92

2. **Remedy of Defects without Service of Formal Notice.—**

Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority or their officers	67

3. **Action under Statutory Powers.—**

A. Proceedings under section 3 of the Housing Act, 1925,

(1) Number of dwelling houses in respect of which notices were served requiring repairs 21

(2) Number of dwelling houses which were rendered fit after service of formal notices :—

(*a*) By Owners 21

(*b*) By Local Authority in default of owners Nil

(3) Number of dwelling houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close Nil

B. Proceedings under Public Health Acts.

(1) Number of dwelling houses in respect of which notices were served requiring defects to be remedied 225

(2) Number of dwelling houses in which defects were remedied after service of formal notices :—

(*a*) By owners 224

(*b*) By Local Authority in deafult of owners 1

C. Proceedings under sections 11, 14, and 15 of the Housing Act, 1925.

(1) Number of representations made with view to making Closing Orders Nil

(2) Number of dwelling houses in respect of which Closing Orders were made Nil

(3) Number of dwelling houses in respect of which Closing Orders were determined, the dwelling house having been rendered fit Nil

(4) Number of dwelling houses in respect of which Demolition Orders were made Nil

(5) Number of dwelling houses demolished in pursuance of Demolition Orders Nil

Inspection and Supervision of Food.

(*a*) Milk Supply.—Twelve wholesale dealers have their names upon the register and twenty-six retailers. Within the district, there are 23 registered cow-keepers, 5 milk shops, and 1 purveyor. Seven purveyors bring milk from the rural districts, and two registered wholesale dealers are non-resident. In the outlying more rural part of the district there are four cow-keepers, each with one cow. Lime washing is carried out in a satisfactory way and the Dairies, Cowsheds and Milkshops Orders are observed.

(*b*) Meat.—The Inspector reports that 155 visits were paid to the Abattoir while slaughtering was in progress. He inspected 1,154 carcases, viz. : beasts, 176 ; calves, 35 ; sheep and lambs, 607 ; Pigs, 336. A total weight of 1,467 lbs. of meat was unfit for human food and was surrendered. There are no private slaughter houses, and all animals slaughtered in the Public Abattoir have been inspected. Traders carry out the requirements of the Public Health (Meat) Regulations, 1924. Arrangements are in force under which condemned meat is removed to a manure factory.

(*c*) Other Foods.—Butchers', Fishmongers', Provision Dealers', Greengrocers', Bakers', Ice-cream premises are all visited and inspected from time to time. Butchers' premises number 17, Provision Dealers' 15, Greengrocers' 9, Fishmongers' 2, Bakers' 13.

There is a Market for the sale of food stuffs, and food offered for sale is frequently inspected.

The Sanitary Condition of bakehouses, and other premises where food is prepared, is of a high order.

(*d*) Food Poisoning.—Nil.

Sale of Food and Drugs Acts.

Particulars of Samples forwarded to the Public Analyst from the District during the year ending December, 1925.

Name of Sample.	Number Analysed.	Number of Samples Certified as Adulterated or not up to Standard.
Butter	3	—
Cheese, Cheshire	1	—
Cheese, Gruyere	—	—
Cocoa	2	—
Cream	1	1
Cream, Preserved	1	—
Flour	1	—
Lard	1	—
Milk	18	—
Milk, Condensed	2	—
Sweets (Gums)	4	—
Totals - - -	34	1

During the years 1921—1925, one hundred and fifty six samples were analysed and six were found adulterated. Ninety-five of the samples were milk.

Prevalence of, and Control over, Infectious Disease.

The prevalence of Infectious Disease during the period 1921—25 is shown in the following table which gives the case rate per 1,000 of the population.

Year.	Small Pox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Puerperal Fever.	Erysipelas
1921	0.00	0.67	2.17	0.00	0.00	0.15
1922	0.00	0.81	0.44	0.00	0.15	0.44
1923	0.00	0.79	0.86	0.00	0.07	0.29
1924	0.00	4.11	0.48	0.00	0.00	0.00
1925	0.00	2.06	0.93	0.00	0.20	0.00

The corresponding rates for England and Wales are as follows :—

1921		3.64	1.76	0.10	0.06	0.35
1922		2.85	1.37	0.06	0.06	0.35
1923		2.24	1.05	0.08	0.06	0.32
1924		2.16	1.07	0.11	0.06	0.33
1925	0.14	2.36	1.23	0.07	0.06	0.39

Notifiable Diseases during the Year.

Disease.	Total Cases Notified	Cases Treated in Hospital	Total Deaths.
Diphtheria...	13	12	3
Scarlet Fever	31	29	0
Enteric Fever (including Paratyphoid)	—	—	—
Erysipelas	—	—	—
Puerperal Fever	3	1	1
Encephalitis Lethargica ...	—	—	—
Poliomyelitis	—	—	—
Cerebro Spinal Meningitis ...	—	—	—
Pneumonia	18	12	19
Totals - -	65	54	23

Scarlet Fever in 1925 was a continuation of the outbreak in 1924 which occurred after a comparatively immune period in 1921, 1922, 1923, following upon a very extensive incidence in 1919 and 1920.

Diphtheria.—Antitoxin is extensively used and nearly all the charges connected therewith are referred to and paid by the Sanitary Authority. Administration is, practically, invariably by the mouth, and as this is of at least doubtful utility the following passage is again quoted from the Medical Research Council's volume on Diphtheria—

> "Sucklings absorb antitoxin with the milk of immunised mothers, and are thus passively immunised.
>
> There is no evidence that sucklings can absorb more than minute quantities of horse antitoxin from the stomach. Otherwise, in spite of fairly numerous claims for the method of administration by the mouth, it cannot be said to have established its position. Antitoxin is closely attached to proteins that are heterologous to the human tissues, and have therefore to be broken up before absorption. It seems that either all or the greater part of the antitoxin is destroyed in the process."

Table of Age Groups showing Total Cases and Deaths, 1925.

Disease.		Total Cases	Total.		0-1		1-2		2-3		3-4		4-5		5-10		10-15		15-20		20-35		35-45		45-65		65 up	
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Total Cases		65	32	33	2	1	1	1	1	2	...	2	2	3	9	13	5	5	4	3	2	3	5	...	1	...	...	...
Total Deaths		23	11	12	3	5	1	...	...	1	...	...	1	...	...	3	...	...	...	...	3	1	1	...	2	2	...	...
Small Pox	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	Cases	31	12	19	...	...	...	...	1	1	...	...	...	2	5	9	3	4	1	2	1	1	1	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria	Cases	13	4	9	...	...	...	...	...	1	...	2	1	1	2	4	1	1	...	...	...	...	...	...	...	...	...	...
	Deaths	3	...	3	...	...	...	...	...	1	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever (including paratyphoid)	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia	Cases	18	16	2	2	1	1	1	...	...	...	...	1	...	2	...	1	...	3	...	1	...	4	...	1	...	...	...
	Deaths	19	11	8	3	5	1	...	...	...	...	...	1	...	...	1	...	...	...	...	3	...	1	...	2	2	...	...
Puerperal Fever	Cases	3	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	...	...	...	...	...
	Deaths	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...

Table of Age Groups Showing Total Cases and Deaths, 1921-25.

Disease.		Total Cases	Total.		0-1		1-2		2-3		3-4		4-5		5-10		10-15		15-20		20-35		35-45		45-65		65 up	
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Total Cases		328	165	163	7	3	11	6	9	11	8	10	9	10	47	51	18	32	11	9	16	15	16	3	9	9	4	4
Total Deaths		108	60	48	14	14	6	7	1	4	1	3	2	1	4	5	1	...	1	...	7	2	5	2	12	7	6	3
Small Pox	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	Cases	125	49	76	1	...	3	1	2	5	3	4	...	6	21	29	8	22	5	6	4	3	2	...	...	...	...	...
	Deaths	1	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria	Cases	66	29	37	...	1	2	...	2	3	2	3	4	4	11	12	7	8	...	...	1	3	...	1	...	2	...	...
	Deaths	12	4	8	...	...	...	...	1	2	...	1	...	1	3	4	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever (including paratyphoid)	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia	Cases	94	68	26	4	1	5	5	3	2	3	...	5	...	11	5	2	2	5	1	9	4	10	1	7	3	4	2
	Deaths	90	54	36	14	13	6	7	...	2	1	...	2	...	...	1	1	...	1	...	6	1	5	2	12	7	6	3
Puerperal Fever	Cases	6	...	6	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	5	...	...	...	...	...	...
	Deaths	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
Cerebo Spinal Fever	Cases	1	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Poliomyelitis	Cases	1	...	1	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	2	...	2	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Polio-encephalitis	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica	Cases	2	2	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...
	Deaths	1	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Dysentery	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	Cases	12	4	8	...	...	...	...	...	...	...	...	...	...	—	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1	1	...	1	1	1	4	...	2
Malaria	Cases	4	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	1	...	...	...
Chicken Pox	Cases	17	8	9	2	1	1	...	2	1	...	2	...	...	2	5	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...

Table Showing Distribution of Total Cases of Notifiable Diseases, 1925.

Diseases.	Central Ward.		North East Ward		North West Ward.		South Ward.		Whitby Ward.		Pool Ward.		Totals	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
ıtheria	1	1	1	1	1	1	3	5	—	—	—	1	6	9
let Fever	4	1	1	5	2	6	3	5	2	2	—	—	12	19
rperal Fever	—	—	—	1	—	—	—	2	—	—	—	—	—	3
umonia	—	—	3	—	1	—	11	2	1	—	—	—	16	2
sipelas	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ephalitis Lethargica ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—
nonary Tuberculosis ...	—	—	1	—	1	—	6	2	1	—	—	—	9	2
-Pulmonary Tuberculosis ...	—	—	1	—	—	1	3	—	—	—	1	—	5	1
bro Spinal Meningitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—
omyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—
aria	—	—	—	—	—	—	—	—	—	—	—	—	—	—
entery	—	—	—	—	—	—	—	—	—	—	—	—	—	—
ll Pox	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Totals	5	2	7	7	5	8	26	16	4	2	1	1	48	36

Tuberculosis.

Age Periods	NEW CASES.				DEATHS.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
Years	M.	F.	M.	F.	M.	F.	M.	F.
0-1	—	—	—	—	—	—	—	—
5	—	1	4	1	—	—	1	1
10	1	—	1	—	—	1	—	—
15	1	1	—	—	—	—	1	—
20	—	—	—	—	—	—	—	—
25	2	—	—	—	1	—	—	—
35	2	—	—	—	1	—	—	—
45	3	—	—	—	—	1	—	—
55	—	—	—	—	1	—	—	—
65	—	—	—	—	—	—	—	—
65 and upwards ...	—	—	—	—	—	—	—	—
Totals ...	9	2	5	1	3	2	2	1

The three non-pulmonary cases were notified—1 after death ; one ten days before death ; one two and a half months before death.

There was failure to notify in two instances of Pulmonary Tuberculosis. One patient died 15 months ; one 4 months ; and one two and a half months, respectively, after notification.

Where there has been a failure to notify, the practitioner who certifies the fact of death is written to, so that an explanation is received and wilful neglect or refusal to notify are obviated.

Maternity and Child Welfare.

The Council provides a Centre for Infant Welfare consultations. With the increasing recognition of the importance of this work by the ratepayers, the calls upon the accommodation have outgrown the available space, so that the need to establish a Centre more in accordance with the requirements of the town has become urgent. Plans for a Centre have been before the Council. Ante-natal work has remained undeveloped, so far as the systematic investigation of normal and morbid conditions is concerned, owing to the impracticability of undertaking it in the rooms at present in use. With the erection of a new Centre, it is proposed to establish an ante-natal clinic, the work in which might be correlated with that of the maternity wards of the local hospital. Arrangements are in force for the supply of milk for mothers and infants, subject to a close scrutiny to determine that the supply is needed, and that no overlapping takes place between the work of the Centre and other agencies. Within the last year, an orthopædic clinic for children under five years of age, under the supervision of the Senior Medical Officer at Leasowe Open Air Hospital, has been established, and is already doing excellent work. Energetic pursuance of the preventive work involved in obtaining satisfactory feeding and hygienic amenities for infants will lessen the number of " the curiously constructed sabre-legged rascals," who seek the assistance of the orthopædic surgeon and may even dimin-

ish the number of his paralytic clientele. A bed maintained by the Council in the West Kirby Children's Convalescent Home and the Clinic's association with the Cottage Hospital have proved useful adjuncts to the Centre's labours. The Health Visitor paid 4,738 visits in 1925 ; and mothers, infants, toddlers, and expectant mothers recorded 5,568 attendances at the Centre.

1925.

	Cases.			Vision unimpaired	Vision impaired	Total blindness	Deaths
	Notified	Treated.					
Ophthalmia Neonatorum	1	At Home. Nil.	In Hospital 1	1	Nil	Nil	Nil

1921-25.

	7	1	6	5	2	Nil	Nil

Hoylake and West Kirby Urban District.

1. General Statistics.

Area (acres)	1,979
Population (1921)	17,068
Estimated Population (1925)	17,230
Number of inhabited houses (1921)	3,096
Number of Families or separate occupiers (1921) ...	3,581
Rateable value	£130,000
Sum represented by a penny rate	£510

Social Conditions and Chief Occupations of the Inhabitants.—These are indicated in the following table from the Census of 1921.

Occupation.	Males.	Females.
Total Population	7,135	9,933
Aged 0-11	1,774	1,593
Aged 12 and upwards	5,361	8,340
I. Fishermen	68	—
II. Agricultural Occupations	337	33
III. Mining and Quarrying Occupations	6	—
IV. Makers of Coke, Lime, Cement, etc.	3	—
V. Makers of Bricks, Pottery, Glass	11	20
VI. Workers, in Chemicals, Paints, etc.	31	—
VII. Metal Workers	281	6
VIII. Workers in Precious Metals	2	—
IX. Electrical Apparatus Makers, Fitters, etc. ...	76	3
X. Makers of Watches, etc.	11	1
XI. Workers in Skins ; Leather Goods Makers ...	6	1
XII. Textile Workers	9	10
XIII. Makers of Textile Goods and Articles of Dress	68	124
XIV. Makers of Foods, Drinks and Tobacco ...	79	63
XV. Workers in Wood, etc.	202	8
XVI. Paper Workers ; Printers, etc.	31	14
XVII. Builders, Bricklayers, etc.	179	—
XVIII. Painters and Decorators	116	—
XIX. Workers in other Materials	2	—
XX. Workers in Mixed and Undefined Materials ...	26	6
XXI. Persons in Gas, Water, Electricity Supply ...	32	—
XXII. Transport Workers	568	35
XXIII. Commercial and Financial Occupations ...	969	287
XXIV. Public Administration and Defence	114	22
XXV. Professional Occupations	277	304
XXVI. Persons Employed in Entertainments, etc. ...	56	17
XXVII. Persons Employed in Personal Service ...	131	1,906
XXVIII. Clerks, Draughtsmen, Typists, etc.	417	259
XXIX. Warehousemen, etc.	27	5
XXX. Stationary Engine Drivers, etc.	20	—
XXXI. All other occupations	249	7
Total Occupied	4,404	3,131
XXXII. Unoccupied and Retired	957	5,209
Total Occupied and Unoccupied	5,361	8,340

The figures in the preceding table include :—

	Males.	Females.
Gardeners	213	10
Makers of Bricks and Pottery	—	20
Seamen	106	—
Domestic Servants	—	1,523
Lodginghouse Keepers	—	129

Hoylake and West Kirby District shows the second highest proportion in Cheshire of workers in commerce and finance with a ratio of 181 per 1,000. The general figure for the County is 87 per 1,000 males, and it is interesting to find that Wallasey "serving as a dormitory for Liverpool workers," has 146 per 1,000. Hoylake occupies the fifth place in the ratio of professional workers with 52 per 1,000, which may be contrasted with 24 per 1,000 for the County and 34 for Wallasey. Areas with the largest number of professional workers have the largest proportion of domestic servants, and Alderley Edge and Bowdon are the only two places in Cheshire with a larger proportion than Hoylake and West Kirby.

The following table shows the natural increase (that is the excess of births over deaths) of population from 1921-1925.

Year.	Population.	Natural Increase per 1,000 Population.
1921	16,530	5.6
1922	16,560	3.1
1923	16,580	3.8
1924	16,880	1.2
1925	17,230	1.8

2. Extracts from Vital Statistics of the Year 1925.

These statistics are calculated on the population of 17,230 supplied by the Registrar General. This is only an increase of 350 over the figure estimated for the mid-year 1924.

Births.

	Total	Males.	Females.
Legitimate ...	209	116	93
Illegitimate ...	8	6	2
	217	122	95

Birth Rate (R.G.) 12.5.

Table of Number of Births and Birth Rates, 1920—1924.

Year	Number.	Birth Rate.
1920	277	17.3
1921	263	15.9
1922	241	14.5
1923	238	14.3
1924	201	11.9

The average number of births per annum in the years 1920-1924 was 244.

Deaths.

Total, 185 ... Males, 94 ... Females, 91

Death Rate (R.G.) 10.7. The standardised Death Rate was 9.9.

Table of Number of Deaths and Death Rates, 1920-1924.

Year.	Number	Death Rate.
1920	190	11.9
1921	170	10.2
1922	191	11.5
1923	176	10.6
1924	180	10.6

48.6% of the deaths were in the age periods over 65 years.

The average number of deaths per annum during the period 1920-1924 was 181.

Number of women dying in, or in consequence of —

Childbirth (from Sepsis) Nil
— (from other causes) Nil

Deaths of Infants under one year of age per 1,000 births, 50.7. Legitimate 9. Illegitimate 2. Total 11.

Table of Infantile Mortality, 1920-1924.

Year.	Rate per 1,000 Births.
1920	111
1921	57
1922	53.9

Year.	Rate per 1,000 Births.
1923	54.6
1924	44.2

Deaths from Measles (all ages)	Nil
Deaths from Whooping Cough (all ages)	4
Deaths from Diarrhœa (under 2 years of age)	1

In the preceding period of 5 years there were 6 deaths from Measles, 6 from Whooping Cough, and 7 from Diarrhœa (under 2 years of age).

Causes of Death.

	All Causes.	Males.	Females.
1.	Enteric Fever	0	0
2.	Small Pox	0	0
3.	Measles	0	0
4.	Scarlet Fever	0	0
5.	Whooping Cough	3	1
6.	Diphtheria	0	0
7.	Influenza	2	2
8.	Encephalitis Lethargica	0	0
9.	Meningococcal Meningitis	0	0
10.	Tuberculosis of Respiratory System	7	7
11.	Other Tuberculous Diseases	1	3
12.	Cancer, Malignant Disease	10	15
13.	Rheumatic Fever	0	0
14.	Diabetes	1	1
15.	Cerebral Hæmorrhage, &c.	3	6
16.	Heart Disease	12	17
17.	Arterio Sclerosis	13	6
18.	Bronchitis	5	2
19.	Pneumonia (All forms)	3	8
20.	Other respiratory Diseases	4	0
21.	Ulcer of the Stomach or Duodenum	2	0
22.	Diarrhœa, &c. (under 2 years)	0	1
23.	Appendicitis and Typhlitis	0	0
24.	Cirrhosis of Liver	0	1
25.	Acute and Chronic Nephritis	3	4
26.	Puerperal Sepsis	0	0
27.	Other Accidents and Diseases of Pregnancy and Parturition	0	0
28.	Congenital Debility and Malformation, Premature Birth	4	0
29.	Suicide	1	0
30.	Other Deaths from Violence	4	0
31.	Other Defined Diseases	16	17
32.	Causes Ill-defined or Unknown	0	0
	Totals - -	94	91

General Provision of Health Services in the Area.

Hospitals provided or subsidised by the Local Authority or by the County Council.

See under North West Cheshire p. 23.

Among the Hospitals available for the Area and within its borders are :—

Hoylake Cottage Hospital.—This is a modern and well organised institution, with a consulting and specialist staff, the members of which exercise similar functions in Liverpool voluntary hospitals.

Lear Home of Recovery.—This is a private residence converted into a convalescent home for adults after acute illness.

Ellen Gonner Home.—This is one of the homes of the Liverpool Invalid Children's Association, and is used for the reception of ailing and delicate children from Liverpool and Birkenhead.

Convalescent Home for Sick Children, West Kirby.—There are 180 beds, and children are received from all parts of Britain as well as from the Wirral area.

Liverpool Hospitals are made use of by Hoylake and West Kirby ratepayers when required.

Clinics and Treatment Centres.—A Maternity and Child Welfare Centre is provided by the County Council.

There is a Day Nursery drawing a subsidy from the County Council and acting as a training school for nurse-maids. It also takes in, for treatment, a number of wasting infants.

School Clinics.—There is a Dentistry Clinic for school children provided by the Education Authority.

Tuberculosis Dispensary.—The dispensary is a lodge in the grounds of the Lear Home, and is not adapted in any way as an adjunct to a tuberculosis campaign. It is dark,

dismal, and its accommodation, consisting of two small rooms, is completely inadequate.

Public Health Officers of the Local Authority.

One Inspector with the qualification of the Royal Sanitary Institute and Meat Inspection Certificate of the School of Hygiene, Liverpool University.

Professional Nursing in the Home.—

(*a*) General, 1 nurse attached to the local Cottage Hospital visits patients in their own homes.

(*b*) For infectious diseases. Nil.

No special arrangements are in existence for the nursing of measles cases. Infectious cases which remain in their own homes, have, as a general rule, private nurses provided for them.

Midwives.—The midwives are now under the control of the County Council. There are 9 practising in the district, 8 of them are certificated.

Chemical Work. The County Analyst receives samples of water taken in the area by the local Health Officers, food samples are taken by Inspectors of the County Council. The Urban District Council retains the services of the Liverpool City Analyst in its water undertaking.

List of Adoptive Acts, Bye-laws, and Regulations.

ADOPTIVE ACTS.

Public Health Acts Amendment Act (Parts 2, 3, 4) ...	1890
Hoylake and West Kirby Improvement Act	1897
Private Streets Works Act	1892
Construction of Marine Lake, Hoylake and West Kirby Improvement Act	1900
Infectious Disease (Prevention) Act	1890
Public Health Acts Amendment Act	1907
Baths and Wash-houses Acts	1899
Dairies, Cowsheds and Milk Shops Regulations ...	1902

BYE-LAWS.

With respect to—

New Streets and Buildings...	1914
Slaughter-houses	1925
Nuisances	1901
Regulating the use of any Steam Organ or similar Noisy Instrument	1926
Regulating Offensive Trades	1925

Sanitary Circumstances of the Area.

WATER.—The water supply was acquired by the Urban District Council in 1925. Six townships of the adjacent Rural District are supplied from the same sources. The supply is constant, of a high degree of organic purity, and has a hardness of twelve and a half degrees. The Analyst's Report on a sample from the town mains in November, 1925, states :—

> "The water was clear, bright, colourless, odourless. It was also free from lead and copper and from solid matter in suspension.
>
> The water is of an exceptionally high degree of organic purity, and is in every way well suited for drinking and domestic purposes."

There is an ample supply for the Urban District and five townships, but in Moreton difficulties are encountered in association with the peculiar growth of this place. However, at Moreton, the Liverpool supply to Wallasey can be utilised by arrangement, from time to time, when for any reason the Council supply is limited. Bungalow populations are supplied from standpipes, but in the Urban District water is laid on to all the houses with the exception of 14 cottages supplied from standpipes and two houses remote from mains.

The sources of the water supply are two pumping stations at Grange Hill and Newton. At Grange Hill there are two wells about 73 yards apart. Number one has a total depth of 415 feet and number two 967 feet. This Grange Hill station can yield 7,000,000 gallons per week. The Newton Station is half-

a-mile east of the Grange borings and the depth of the borehole is not stated in the Geological Memoir. The analyses taken over the series of years from 1910 show little variation in the composition of the water, which is delivered into the town mains from both pumping stations. The amount of water available is 1,200,000 gallons per day. Number one reservoir was constructed in 1878, is 19 feet in depth, and has a capacity of 585,000 gallons. Number two reservoir, built in 1903, has a depth of 26 feet, and holds 2,804,990 gallons. The Grange Hill pumps can deliver to either reservoir and the Newton pumps to number two only. The possibility of contamination of these deep borings is remote. Sometimes the hardness of the water, which, in fact, is only a moderate hardness, leads to criticism, so that it may be necessary to explain that the water is derived from a rock formation in which granules of sand which compose the rock are cemented together by lime salts, and the solution of these lime salts in the water is part of the cause of the hardness.

Rivers and Streams.—There are no polluted rivers or streams. At one period numerous complaints were received that the Birket, which constitutes the boundary of the district at Fornall's Green Lane, was converted into an open sewer by the reception of sewage from cesspool overflows in the neighbouring area. The offending cesspools have been abolished and the sewage is now received into the Council's sewers with the result that this cause of complaint no longer exists.

Drainage and Sewerage.—The town is well sewered and sewers are extended as the town grows. During 1925, one-and-a-half miles of sewer were constructed. At West Kirby the Sewers open directly into the tidal waters of the Dee Estuary, while at Hoylake and Meols there are retention tanks closed by Penstock valves so that sewage is discharged only on the ebb tide. Surface water drainage passes to the River Birket, the Marine Lake West Kirby, and to shore outlets at the Estuary and sea shore. 1,448 yards of new foul sewers and 1,080 yards of surface water sewers were constructed in 1925.

Closet Accommodation.—Practically the entire town is provided with water closets of good modern type. There are three cottages with pail closets and the pail is in use at summer camps. Five privy-middens survive the sanitary reforms of the local administration.

Scavenging.—The removal and disposal of house refuse is conducted by Council workmen, and is systematically and efficiently performed. Motor lorries are used for conveyance of refuse through the town. 3,471 houses are provided with covered movable bins; 139 fixed ashpits still persist. With regard to the latter, the Council attempts, wherever it is possible, to obtain the substitution of bins, and no new houses are built with fixed receptacles. Trade and garden refuse are collected free of charge. For a number of years a systematic campaign has been conducted against the practice of accumulating stable manure and there is now a total abolition of the custom of collecting this beyond a maximum period of seven days. Ultimate disposal is at the Pulverizing Works which have a salvage screening plant and incinerator. The refuse is roughly sorted and raked into a hopper mouth on the pulverizer, and issues at the lower end of the machine in a finely-divided innocuous, odourless, and loamy state. The pulverised material is of good manurial value. A conveyor catches it in its exit from the pulveriser and lifts it to a sufficient height to discharge over lorries for removal.

Sanitary Inspection of the Area.—The following table submitted by the Inspector, gives a summary of the sanitary work:—

A. Number and Nature of Inspections Made.	B. Number.	C. Number of Notices Served.		D. Result of Service of Notices.		E. Prosecutions.
		Statutory	Informal	Notices Complied with	Remaining in hand	(if any)
1. Dwelling Houses (Inspection for Nuisances)	882	69	396	453	12	0
2. Back to Back Houses	25	0	7	7	0	0
3. Tents, Vans, Sheds, etc. (Chiefly at Bungalows)	116	0	3	3	0	0
4. Courts, Yards, Passages	56	1	42	43	0	0
5. Privy Middens, Earth and Pail Closets (Chiefly at Bungalows) ...	76	0	0	0	0	0
6. Drains Tested	33	9	17	26	0	0
7. Blocked Drains	56	11	45	56	0	0
8. Ditches, Water Courses, etc., Blocked	5	0	3	3	0	0
9. Offensive Accumulations	38	1	37	38	0	0
10. The Keeping of Animals (P.H.A. 1875, S. 91)	21	0	20	20	0	0
11. Offensive Trades (P.H.A. 1875, S. 112, and P.H.A. 1907, S. 51)	50	0	5	5	0	0
12. Slaughterhouses (P.H.A., 1875, S. 170 and P.H.A. 1890, S. 28 to 31)	226	0	16	16	0	0
13. Bakehouses (F. & W. Act, 1901, S. 97 to 102	91	0	27	27	0	0
14. Other Places where Food is Produced or sold (P.H.A. 1890, S. 28)	103	0	8	8	0	0
15. Piggeries	42	0	13	13	0	0
16. (a) Dairies	57	0	2	2	0	0
(b) Cowsheds	45	0	16	16	0	0
(c) Milkshops	57	0	3	3	0	0
17. (a) Factories	35	1	4	5	0	0
(b) Workshops	89	0	11	11	0	0
(c) Workplaces	35	0	0	0	0	0
18. (a) Infectious Diseases Inquiries and Re-visits	122	0	12	12	0	0
(b) Sickrooms Disinfected	145	0	3	3	0	0
(c) Infectious Beds, etc., Steam Disinfected	52	0	1	1	0	0
(d) Beds, etc., Burnt	18	0	0	0	0	0
(e) Sickroom Walls Stripped of Paper	9	0	1	1	0	0
19. Stable Premises Inspected	122	0	53	53	0	0
20. School Closets, etc., Inspected	22	0	7	7	0	0
21. Ice Creameries	41	0	11	11	0	0
22. Summer Camps, Meols	5	0	3	3	0	0
Total	2674	92	766	846	12	0

SCHOOLS.—Owing to its amenities, the district offers attractions for the establishment of schools for the children of the affluent. The Public Elementary Schools and the Secondary School have ample water supply, and are maintained in a sanitary condition.

Housing.

1. General Housing Conditions in the Area.

(1) GENERAL HOUSING CONDITIONS.—These may justly be termed good. There are few houses in the area which date back to a period longer than 50 years ago. Between 1871 and 1901 a great development occurred, and houses which in the former year numbered 441, in the latter had increased to 2,040. At the 1911 census, a total of 2,801 houses were enumerated and in 1921 3,096. Since that date 332 houses have been erected and occupied. Very few of these houses can be considered to be working class dwellings.

(2) EXTENT OF SHORTAGE OR EXCESS OF HOUSES.—The nature of the district, viz., a seaside, golfing, resort catering for summer visitors, involves the erection of a type of house arranged to accommodate temporarily a large number of guests. In winter, room accommodation is probably in excess of the actual requirements of the inhabitants, but this is converted to a shortage when there is a satisfactory summer.

2. Overcrowding.

(1) EXTENT.—See under (4).

(2) CAUSES.—

(3) MEASURES TAKEN OR CONTEMPLATED FOR DEALING WITH OVERCROWDING.—Nil.

(4) PRINCIPAL CASES OF OVERCROWDING DURING 1925, AND ACTION TAKEN.—No report on overcrowding was received from the routine examination of houses or from inspection on the occurrence of infectious disease.

60 houses, with 2 or 3 bedrooms each, selected in streets where overcrowding would be most rife, if it existed, were examined to determine the number of families and occupants. It was found that there were two families in 4 and 3 in one

instance. No two bedroomed house had more than one family occupying it. The four cases in which two families occupied 3 bedroomed houses showed the following :—

1.—2 adult males, 2 adult females, 7 children.
2.—2 adult males, 2 adult females, 7 children
3.—2 adult males, 2 adult females, 8 children
4.—2 adult males, 2 adult females, 7 children

Three families occupying one 3-bedroomed house had the following population :—3 adult males, 3 adult females, 3 children.

3. (*a*) General standard of housing in the area is very high.

(*b*) General character of the defects found to exist in unfit houses—

The following is a summary of the defects found in 552 houses examined :—

1.	Defective drainage, plumbers' fittings and blocked drains in	246
2.	Defects in connection with w.c's.	51
3.	Defective walls and roofs	45
4.	Defective ashpits or ashbins	68
5.	Yards, dirty or defective	73
6.	Animals kept in a dirty condition	21
7.	Interference with ventilation owing to broken window cords	49

(2) General Action Taken as regards Unfit Houses.—In this district, action is taken almost exclusively under the Public Health Acts, and a large amount of work is done by service of informal notices without the need for recourse to statutory powers.

4. Unhealthy Areas.—There are none in Hoylake and West Kirby.

Housing Statistics for the year 1925.

Number of new houses erected during the year :—

(*a*) Total, including numbers given separately under (*b*)	127

(*b*) With State assistance under the Housing Acts

(i.) By the Local Authority Nil

(ii.) By other bodies or persons Nil

1. **Unfit Dwelling Houses.**

Inspection—

(1) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts) 907

(2) Number of dwelling houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910, or the Housing Consolidated Regulations, 1925 ... 45

(3) Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation Nil

(4) Number of dwelling houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation 766

2. **Remedy of Defects without Service of Formal Notice.**—

Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority or their Officers 674

3. **Action under Statutory Powers.**

A. Proceedings under Section 3 of the Housing Act, 1925.

(1) Number of dwelling houses in respect of which notices were served requiring repairs Nil

(2) Number of dwelling houses which were rendered fit after service of formal notices :—

(*a*) By owners Nil

(*b*) By Local Authority in default of owners Nil

(3) Number of dwelling houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close Nil

B.	Proceedings under Public Health Acts.	
(1)	Number of dwelling houses in respect of which notices were served requiring defects to be remedied	92
(2)	Number of dwelling houses in which defects were remedied after service of formal notices :—	
	(*a*) By owners	751
	(*b*) By Local Authority in default of owners	3
C.	Proceedings under Sections 11, 14 and 15 of the Housing Act, 1925.	
(1)	Number of representations made with view to making Closing Orders	Nil
(2)	Number of dwelling houses in respect of which Closing Orders were made	Nil
(3)	Number of dwelling houses in respect of which Closing Orders were determined, the dwelling house having been rendered fit	Nil
(4)	Number of dwelling houses in respect of which Demolition Orders were made	Nil
(5)	Number of dwelling houses demolished in pursuance of Demolition Orders	Nil

Inspection and Supervision of Food.

(*a*) Milk Supply.—A very few years ago all the milk consumed in this area was produced within it, but now the larger proportion is imported from the neighbouring rural area, and from North Wales. All the establishments connected with milk production and distribution are maintained on a high standard of cleanliness, and are inspected at short intervals.

(*b*) Meat.—Hoylake and West Kirby resembles the other districts in North West Cheshire in receiving a very large proportion of its meat from the Birkenhead Lairages. It has been found possible to inspect all the carcases slaughtered in the local establishments. Two hundred and twenty six visits to the slaughter houses were paid by the Inspector in 1925. Butchers give notice of the time when they intend to slaughter, and a stage has now been reached when it is fair to state that the 1924 Meat Regulations are observed.

	1920.		January, 1925.		December, 1925.
Registered	1	...	1	...	1
Licensed	3	...	4	...	4

(*c*) Other Foods.—All places where food is prepared for sale are kept under strict surveillance. Bye-laws regulating fish frying premises were sanctioned in 1925. Special attention is directed to premises in which ice-cream is produced. The twenty-four bake-houses are inspected frequently and premises. utensils, and surroundings are kept in good condition. Existing powers have not been found inadequate in any way to control the sanitary state of bake-houses and other food premises, for the proprietors are quite ready to co-operate with the officials to obtain unexceptional conditions. Definite regulations are required to prohibit the exposure of fish and poultry under conditions which lend themselves to the production of contamination.

(*d*) Food Poisoning.—No instance of food poisoning or suspected food poisoning has been reported.

Sale of Food and Drugs Acts.

Particulars of Samples forwarded to the Public Analyst from the District during the year ending 31st December, 1925.

Name of Samples.	Number Analysed.	Number of Samples Certified as Adulterated or not up to Standard.
Butter	11	—
Cakes and Pastry	1	—
Camphorated Oil	1	—
Castor Oil	2	—
Cheese, Cheshire	5	—
Cheese, Gruyere	—	—
Cream	4	1
Cream, Preserved	2	—
Epsom Salts	1	—
Ginger	1	—
Gregory's Powder	1	—
Lard	6	—
Liquorice Powder	1	—
Margarine	4	—
Milk	18	3
Milk, Condensed	—	—
Seidlitz Powder	2	—
Totals - - -	60	4

Prevalence of, and Control over, Infectious Diseases.

The incidence of Infectious Diseases in the years 1921-25 is shown in the following table which gives the case rate per 1,000 of the population.

Year.	Small Pox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Puerperal Fever.	Erysipelas.
1921	0.00	1.57	2.90	0.12	0.12	0.12
1922	0.00	1.99	0.79	0.12	0.00	0.42
1923	0.00	4.28	0.66	0.18	0.06	0.36
1924	0.00	1.57	0.06	0.29	0.06	0.17
1925	0.00	1.27	0.17	0.11	0.05	0.23

Case Rate per 1,000 of population in England and Wales.

Year.	Small Pox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Puerperal Fever.	Erysipelas.
1921		3.64	1.76	0.10	0.06	0.35
1922		2.85	1.37	0.06	0.06	0.35
1923		2.24	1.05	0.08	0.06	0.32
1924		2.16	1.07	1.11	0.06	0.33
1925	0.14	2.36	1.23	0.07	0.06	0.39

Notifiable Diseases (other than Tuberculosis) during the year 1925.

Disease.	Total Cases Notified	Cases Treated in Hospital	Total Deaths.
Diphtheria	3	1	—
Scarlet Fever	22	16	—
Enteric Fever (including Paratyphoid)	2	—	—
Erysipelas	4	3	—
Puerperal Fever	1	—	—
Encephalitis Lethargica ...	1	—	—
Acute Poliomyelitis ...	—	—	—
Pneumonia	23	5	11
Totals - -	56	25	11

Four of the Scarlet Fever Cases and one enteric case occurred in the Children's Convalescent Home, West Kirby. One of the Diphtheria cases was at the Ellen Gonner Home, Hoylake.

Table of Age-Groups, showing Total Cases and Deaths, 1925.

Disease		Total Cases	Total		0-1		1-2		2-3		3-4		4-5		5-10		10-15		15-20		20-35		35-45		45-65		65 up	
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Total Cases ...		56	21	35	...	...	...	...	1	1	2	1	...	2	5	5	2	6	...	3	6	7	1	5	3	3	1	2
Total Deaths ...		11	3	8	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	...	1	2	4	...	1
Small Pox	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	Cases	22	6	16	...	...	...	...	1	...	1	1	...	...	2	4	1	4	...	2	1	2	...	3	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria	Cases	3	1	2	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	1	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever (including P'typhoid)	Cases	2	2	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia	Cases	23	9	14	...	...	...	...	...	1	...	...	...	2	1	1	...	2	...	...	5	2	1	2	1	2	1	2
	Deaths	11	3	8	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1	1	...	1	2	4	...	1
Puerperal Fever	Cases	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cerebro Spinal Fever	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Poliomyelitis	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Polioencephalitis	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica	Cases	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	Cases	4	2	2	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	...	1	1	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Table of Age Group, Showing Total Cases and Deaths, 1921-25.

Disease.		Total Cases	Total		0-1		1-2		2-3		3-4		4-5		5-10		10-15		15-20		20-35		35-45		45-65		65 up	
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Total Cases		384	176	208	...	1	3	2	7	5	8	10	3	7	48	49	33	34	17	23	22	32	17	18	12	18	6	9
Total Deaths		79	38	41	3	2	1	4	...	...	...	1	...	1	1	2	...	...	...	1	7	2	15	8	8	9	3	11
Small Pox	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	Cases	177	72	105	...	...	2	1	4	3	5	8	2	4	29	37	18	24	8	12	2	9	2	6	...	1	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria	Cases	73	40	33	...	...	1	...	2	...	2	...	1	...	13	7	11	3	4	10	2	10	2	1	2	2	...	...
	Deaths	1	1	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever (including paratyphoid)	Cases	13	8	5	...	...	...	...	...	...	...	...	...	...	1	...	1	2	1	...	2	1	2	1	...	1	1	...
	Deaths	3	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	...	...
Pneumonia	Cases	86	45	41	...	1	...	1	1	2	...	1	...	3	5	3	1	4	3	1	16	4	8	5	6	8	5	8
	Deaths	68	34	34	3	2	1	4	...	...	...	...	...	1	...	1	...	...	...	1	6	2	13	4	8	8	3	11
Puerperal Fever	Cases	5	...	5	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	4	...	1	...	...	...	...
	Deaths	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...
Cerebro Spinal Fever	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Poliomyelitis	Cases	2	...	2	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	1	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Polio-encephalitis	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica	Cases	6	4	2	...	...	...	...	...	...	...	...	...	...	...	1	2	...	1	...	...	...	...	1	1	...	...	...
	Deaths	2	...	2	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1	...	...	...	...
Dysentery	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	Cases	22	7	15	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	4	3	3	3	6	...	1
	Deaths	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...
Malaria	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chicken Pox	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Table Showing Distribution of Total Cases of Notifiable Diseases, 1925.

Diseases.	District.			Total Cases.
	Hoylake	Meols	WestKirby	
Diphtheria	1	—	2	3
Scarlet Fever	10	—	12	22
Enteric Fever	—	1	1	2
Pneumonia	13	2	8	23
Erysipelas	2	1	1	4
Puerperal Fever	1	—	—	1
Encephalitis Lethargica ...	—	—	1	1
Cerebro Spinal Meningitis ...	—	—	—	—
Poliomyelitis	—	—	—	—
Pulmonary Tuberculosis ...	12	—	13	25
Non-Pulmonary Tuberculosis	—	1	2	3
Totals	39	5	40	84

Tuberculosis.

Age Periods	NEW CASES.				DEATHS.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
Years								
1	—	—	—	—	—	—	—	1
5	—	—	1	1	—	—	1	1
10	—	—	—	—	—	—	—	—
15	1	—	—	—	—	—	—	—
20	—	1	—	—	—	—	—	—
25	2	4	—	1	1	—	—	—
35	4	6	—	—	1	1	—	—
45	2	2	—	—	—	2	—	1
55	2	1	—	—	3	3	—	—
65	—	—	—	—	1	1	—	—
65 and upwards ...	—	—	—	—	1	—	—	—
Totals ...	11	14	1	2	7	7	1	3

One of the four non-pulmonary cases was not notified ; one was notified on the day of death ; one died 6 days after the notification, and one 2 months.

Four of the pulmonary cases were not notified ; one died on the day of notification ; five within 6 months ; four over 1 year. The longest duration after notification was 6 years.

1925.

OPHTHALMIA NEONATORUM.	Cases.			Vision unimpaired.	Vision impaired.	Total Blindness.	Death.
	Notified.	Treated.					
		At Home.	In Hospital.				
	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.
1921-1925.							
	1	1	Nil.	1	Nil.	Nil.	Nil.

Neston and Parkgate Urban District.

1. General Statistics.

Area (Acres)	3,331
Population (1921)	5,195
Population (1925) Estimated...	5,407
Number of inhabited houses (1921)	970
Number of families or separate occupiers (1921) ...	1,036
Rateable value	£29,567
Sum represented by a penny rate	£94

Social Conditions and Chief Occupations.—These are shown by the following table from the Census Report, 1921.

Occupation.	Males.	Femlaes.
Total Population	2,511	2,684
Aged 0-11	688	597
Aged 12 and upwards	1,823	2,087
I. Fishermen	53	0
II. Agricultural Occupations	218	31
III. Mining and Quarrying Occupations	256	0
IV. Makers of Coke, Lime, Cement, etc.	0	0
V. Makers of Bricks, Pottery, Glass	1	0
VI. Workers, in Chemicals, Paints, etc.	1	1
VII. Metal Workers	93	0
VIII. Workers in Precious Metals	0	0
IX. Electrical Apparatus Makers, Fitters, etc. ...	23	0
X. Makers of Watches, etc.	1	0
XI. Workers in Skins ; Leather Goods Makers ...	2	0
XII. Textile Workers	1	1
XIII. Makers of Textile Goods and Articles of Dress	15	16
XIV. Makers of Foods, Drinks and Tobacco ...	24	10
XV. Workers in Wood, etc.	81	4
XVI. Paper Workers ; Printers, etc.	2	6
XVII. Builders, Bricklayers, etc.	138	0
XVIII. Painters and Decorators	28	0
XIX. Workers in other Materials	0	0
XX. Workers in Mixed and Undefined Materials ...	8	0
XXI. Persons in Gas, Water, Electricity Supply ...	4	0
XXII. Transport Workers	124	9
XXIII. Commercial and Financial Occupations ...	113	43
XXIV. Public Administration and Defence	17	7
XXV. Professional Occupations	53	58
XXVI. Persons Employed in Entertainments, etc. ...	13	5
XXVII. Persons Employed in Personal Service ...	37	397
XXVIII. Clerks, Draughtsmen, Typists, etc.	60	34
XXIX. Warehousemen, etc.	4	9
XXX. Stationary Engine Drivers, etc.	15	0
XXXI. All other occupations	145	1
Total Occupied	1,530	632
XXXII. Unoccupied and Retired	293	1,455
Total Occupied and Unoccupied	1,823	2,087

The figures in the preceding table include :—

	Males.	Females.
Gardeners	82 ...	14
Agricultural Labourers	87 ...	11
Coal Miners	256 ...	—
Domestic Servants	— ...	302

The natural increase (excess of births over deaths) of the population in the years 1921-25 is shown in the following table :—

Year.	Population.	Natural Increase per 1,000 Population.
1921	5,150	14.4
1922	5,193	12.4
1923	5,232	10.0
1924	5,397	9.8
1925	5,407	6.1

2. Extracts from Vital Statistics of the Year 1925.

These statistics are calculated on the population of 5,407 supplied by the Registrar General. This is an increase of 10 over the 1924 estimate.

Births.

	Total.	Males.	Females.
Legitimate ...	103	43	60
Illegitimate ...	3	3	0
	106	46	60

Birth Rate (R.G.) 19.6.

Table of number of Births and Birth Rates, 1920-1924.

Year.	Number.	Birth Rate.
1920	145	31.5
1921	123	23.8
1922	113	21.7
1923	105	20.0
1924	113	20.9

The average number of births per annum in the years 1920-1924 was 119.

Deaths.

Total, 73 ... Males, 40 ... Females, 33

Death Rate (R.G.) 13.5.

47.9 % of the deaths were those of persons 65 years of age or over.

Table of Number of Deaths and Death Rates, 1920-1924.

Year.	Number.	Death Rate.
1920	69	15.0
1921	49	9.5
1922	49	9.4
1923	53	10.1
1924	60	11.1

The average number of deaths per annum in the years 1920-1924 was 56.

Number of women dying in, or in consequence of

Childbirth (from Sepsis)	1
— (from other causes)	Nil

Deaths of infants under one year of age per 1,000 births, 47.1. Legitimate 4. Illegitimate 1. Total 5.

Table of Infantile Mortality, 1920-1924.

Year.	Rate per 1000 Births.
1920	89
1921	56.9
1922	53
1923	47.6
1924	79.0

Deaths from Measles (all ages)	2
Deaths from Whooping Cough (all ages)	4
Deaths from Diarrhœa (under 2 years of age)	Nil

There was 1 death from measles in the preceding 5 years. There was 1 death from Whooping Cough in the period 1920-1924, and 4 deaths from Diarrhœa in children (under 2 years of age) in the same period.

There was no unusual or excessive mortality during the year.

Causes of Death.

	All Causes.	Males.	Females.
1.	Enteric Fever	0	0
2.	Small Pox	0	0
3.	Measles	1	1
4.	Scarlet Fever	0	0
5.	Whooping Cough	2	2
6.	Diphtheria	0	0
7.	Influenza	1	0
8.	Encephalitis Lethargica	0	0
9.	Meningococcal Meningitis	0	0
10.	Tuberculosis of Respiratory System	4	2
11.	Other Tuberculous Diseases	1	1
12.	Cancer, Malignant Disease	2	1
13.	Rheumatic Fever	0	0
14.	Diabetes	0	2
15.	Cerebral Hæmorrhage, &c.	7	0
16.	Heart Disease	5	8
17.	Arterio Sclerosis	2	4
18.	Bronchitis	0	1
19.	Pneumonia (All forms)	2	2
20.	Other Respiratory Diseases	1	0
21.	Ulcer of the Stomach or Duodenum	0	0
22.	Diarrhœa, &c. (under 2 years)	0	0
23.	Appendicitis and Typhlitis	0	0
24.	Cirrhosis of Liver	1	0
25.	Acute and Chronic Nephritis	1	0
26.	Puerperal Sepsis	0	1
27.	Other Accidents and Diseases of Pregnancy and Parturition	0	0
28.	Congenital Debility and Malformation, Premature Birth	0	1
29.	Suicide	2	1
30.	Other Deaths from Violence	5	0
31.	Other Defined Diseases	3	6
32.	Causes Ill-defined or Unknown	0	0
	Totals - -	40	33

General Provision of Health Services in the Area.

Hospitals provided or subsidised by the Local Authority or by the County Council :—

(1). Tuberculosis—Cheshire County, etc. Sanatorium, Market Drayton.

(2). Maternity—Nil.

(3). Children—Nil.

(4). Fever—Joint Hospital, Clatterbridge ; Joint Convalescent Home, Pensby.

(5). Small Pox—Arrangements made by Wirral Joint Hospital Board with Liverpool Port Sanitary Authority.

(6). Other—Nil.

Liverpool hospitals are extensively used by the rate payers.

Cottage Hospital maintained by subscription and payments of patients.

Institutional Provision for unmarried mothers, illegitimate infants and homeless children in the district Nil

Ambulance Facilities :—

(*a*) For Infectious Cases.—The Wirral Joint Hospital Board Ambulances.

(*b*) For Non-infectious and Accident Cases.—The Council, by arrangement with the County Borough of Birkenhead, provides a free ambulance service for the removal of accident and sudden illness cases to Neston, Birkenhead or Clatterbridge Hospitals, or to their homes. Cases which occur in the streets or other public places within the urban district are entitled to this service.

Clinics and Treatment Centres.—Infant Welfare Centre of County Council.

Day Nurseries—Nil.

School Clinics—Nil.

Tuberculosis Dispensary—Neston patients with tuberculous diseases attend at the Cheshire County Dispensaries.

Venereal Disease Treatment—County Arrangements.

Public Health Officers of the Local Authority :—

There is one Inspector who is also the Surveyor. He is provided with clerical assistance and an Assistant Building Inspector who is also Foreman of Roads. The Inspector holds the Certificate of the Royal Sanitary Institute and the Meat Inspection Certificate of Liverpool University.

Professional Nursing in the Home.

(*a*) General, 1 district nurse (private organization) the Neston Nursing Association.

(*b*) For infectious diseases. Nil.
Measles. Nil.

Midwives.—3, 2 of whom are certificated.

Chemical Work.—The County Analyst examines samples of water and foods which are forwarded to him from the district.

List of Adoptive Acts, Bye-Laws, and Regulations.

ADOPTIVE ACTS.

Infectious Disease (Prevention Act)	1890
Public Health Acts Amendment Act 1890 (Parts 3, 4)	1892
Public Health Acts Amendment Act	1907
Dairies, Cowsheds and Milk Shops Regulations ...	1900

BYE-LAWS.

With respect to—

New Streets and Buildings	1908
Alteration of Buildings	1893
Nuisances	1893
Slaughter-houses	1893
Cemetery	1904
Common Lodging Houses	1905
Tents, Vans, Shed and Similar Structures	1921

Sanitary Circumstances of the Area.

WATER.—The supply is from Waterworks which are the property of the Council and the water is of excellent quality. Acquired by the Council about 50 years ago, the undertaking has proved sufficient for the requirements of the consumers until within the last five years, when the Council in order to be in a position to cope with the anticipated developments of the town, engaged the services of an expert water engineer to report upon the supply, reservoirs and plant. Advice given by the expert has been followed with the result that works are in progress to sink an additional well, to provide increased storage accommodation, and to install modern machinery. When these extensions are complete, it is calculated that 30,000 gallons per hour could be available. Supply is constant, and is by gravitation to the whole area, this result being secured by pumping to a water tower so as to reach the higher levels of the district. Liverpool Corporation mains from Lake Vyrnwy pass through Neston, and formerly, when a breakdown occurred in the local machinery, connections were made to them so that no scarcity was experienced. This accessory source of supply is no longer available, but the District Council can, by agreement, purchase water from the Alwen scheme of the Birkenhead Corporation, the mains of which also pass through Neston. The report of the engineer showed that the time was fully ripe for extension as the pumping plant was old and very expensive to run ; the storage capacity was only a reserve of one average day's consumption, and there were defects in the reservoir and water tower. In 1919, the consumption of water was some 36

gallons per head of the population per day. A consumption greatly in excess of the needs of the district, and pointing to waste. That figure has now been reduced to 28.7 gallons which the engineer does not consider excessive in a district where there is a considerable proportion of large houses. When the works are completed, there will be a storage capacity of over 550,000 gallons. Water is supplied directly to the houses with the exception of some 80 cottages whose occupants have to carry it from 25 standpipes. The largest number of cottages supplied from any one standpipe is five. The source of the supply is New Red Sandstone and the borings pass to a depth of 330 feet. The new bore hole is situated a few feet from the old one and is still in the Bunter Pebble-beds (the core has been examined by Professor Boswell, Liverpool University) so it may be presumed that the old bore hole is in the same formation and not in the Lower Mottled Sandstone as stated in the Geological Memoir. Samples were taken from several places in the district in September, 1925, owing to complaints of a brown tint in the water, but the analyst reported " water of exceptional organic purity " in every instance. The total hardness was reported as 14.0, the temporary was 9.4, and the permanent 4.6.

Rivers and Streams.—There are no polluted rivers or streams in the area, and ditches which receive sewage effluents from private septic tank installations are closely supervised.

Drainage and Sewerage.—The central parts of the townships are well sewered, but as in other districts, so in Neston, a problem has arisen owing to the tendency for building to take place along main roads in the outskirts of the town, and as developments go on the problem of inadequate, leaky cesspools has to be solved by sewer extensions. The owner of a house built, for example, quarter-of-a-mile from a sewer will ask for facilities to drain into the sewer, the owners of land intervening between the new house and the termination of the sewer, refuse to contribute to a sewer extension stating that they do not wish to develop their land for building purposes, so the proposal of the Council to extend the sewer ceases to be a business proposi-

tion. Discussions are taking place with a view to extend sewers where required and the neighbouring Rural District is in one instance considering the advisability of draining a small aggregation of dwellings on the Neston border into a proposed new sewer.

Great Neston and Little Neston drain to septic tanks and bacteria beds, the effluent from these being piped to the Dee. Parkgate discharges into tidal waters of the Dee. In 1911, a Local Government Board Enquiry was held on the subject of Parkgate Sewerage. Since that date, owing to alterations in the river channels and currents, there has been no complaint.

Closet Accommodation.—Closet accommodation, consisting of modern water closets of good type, is the rule in all the newer houses. Privy middens were customary, until within the last few years, in the gardens of the cottages of the old townships and 120 of these are said to be still in use. Systematic conversion has been undertaken by the Council (under Section 39, Public Health Acts Amendment Act, 1907) of those within reach of the sewers with the result that there are 100 fewer than five years ago. The work of conversion is going on, but in some instances the properties with which the middens are associated, are in a condition for which the remedy is demolition, so that the expense incurred in conversions would not be justifiable.

Scavenging.—Within recent years, 140 ashpits have been replaced by galvanised iron receptacles. A large number of the ashpits are so out of repair that the better and cheaper policy would be the substitution of bins, and this proposition should be put plainly to property owners. Complaints about the inadequate arrangements for the removal of house refuse have almost entirely ceased within the last year or two, as systematic emptying at short intervals is the rule. The Council has its own scavenging staff and the cost to the district is a little over £700 per annum. Trade and stable refuse is not removed by the scavengers. Ultimate disposal is by tipping on agricultural land. The tips vary from 200—300 yards in distance from dwellings.

Sanitary Inspection of the Area.

The following table is supplied by the Sanitary Inspector.

A. Nature of Inspections made.		B. Notices Served.		C. Result of Service of Notices. Prosecutions.			
	Number	Statutory	Informal	Complied with	Remaining in hand	Instituted	Pending
Dwelling houses (General ...	130	31	64	31	33	—	—
Tents, Caravans and Sheds ...	12	—	—	—	—	3	—
Courts, Yards and Passages ...	42	—	—	—	—	—	—
Privy Middens	84	—	—	—	—	—	—
Ashpits and Dustbins	143	—	43	43	—	—	—
Cesspools	15	—	—	—	—	—	—
House Drainage	38	2	15	13	2	—	—
Ditches, Watercourse ...	4	—	—	—	—	—	—
Offensive Accumulations ...	8	—	6	6	—	—	—
Keeping of Animals	6	—	6	6	—	—	—
Slaughterhouse (Private) ...	202	—	—	—	—	—	—
Piggeries	6	—	—	—	—	—	—
Dairies, Milkshops and Cowsheds ...	162	—	—	—	—	—	—
Factories, Workshops, Workplaces	45	—	—	—	—	—	—
Bakehouses (overground) ...	30	—	—	—	—	—	—
,, (underground) ...	8	—	—	—	—	—	—
Infectious Diseases, Inquiries and revisits ...	46	—	—	—	—	—	—
Disinfection of Houses ...	45	—	—	—	—	—	—
Schools Inspections	59	—	1	1	—	—	—
Dirty Houses	4	2	—	2	—	—	—
Miscellaneous	186	—	12	12	—	—	—
Privy Conversions (under Sec 39, P.H.A. Act, 1907) ... 7							
,, ,, by owner ... 4							
Totals - -	1281	35	147	114	35	3	—

SCHOOLS.—The public elementary schools are inspected periodically. They are provided with water from the public supply and the sanitary accommodation is of the water closet type.

Inspection and Supervision of Food.

(*a*) MILK SUPPLY.—The registers contain the names of 20 Purveyors and 21 Producers. Compliance with the Dairies, Cowsheds and Milk Shops Orders is enforced. From the Urban District milk is sent to the Boroughs of Wallasey and Birkenhead, and is received from the neighbouring Rural District. Lime washing is done with regularity.

(*b*) MEAT.—There are three slaughter-houses, none so situated as to be free from the objection that it is within the immediate neighbourhood of cottages. Inspection has been secured of all the animals slaughtered within them. Over 200 visits were paid to them during the year. The Public Health (Meat) Regulations, 1924, are carried out. The customary method of hanging carcases outside the butchers' premises disappeared when the regulations came into force. Meat is sold from five shops and a considerable proportion comes from the Birkenhead Lairages. One Meat Hawker, with a properly constructed vehicle, visits the town.

	1920.	January, 1925.	December, 1925.
Registered	3	3	3
Licensed	0	0	0
Total	3	3	3

(*c*) OTHER FOODS.—There are two fish shops and three fried fish shops. The latter should be controlled by bye-laws. Bakehouses are eight in number and one is an "underground bakehouse." Limewashing is done with regularity.

(*d*) FOOD POISONING.—A small outbreak of food poisoning affecting fifteen persons was reported to the Ministry at the end of July, 1925. The poisoning source was "pressed beef," and five of the persons who had eaten it remained free from symp-

toms. Blood examinations conducted in the Ministry's Laboratory showed the cause to be Gaertner's Bacillus. All the patients recovered. In addition to the human patients, a small dog, who had shared part of a sandwich made with the suspected beef, was violently ill, but also got well.

Sale of Food and Drugs Acts.

Particulars of Samples forwarded to the Public Analyst from the district during the year ending 31st December, 1925.

Name of Samples.	Number Analysed.	Number of Samples Certified as Adulterated or not up to Standard.
Butter	4	—
Lard	2	—
Milk	13	1
Milk, Condensed	—	—
Pepper	1	—
Totals - - -	20	1

Housing.

1. General Housing Conditions of the Area.

(1) General Housing Conditions.—These, on the whole are poor, although the more modern cottages are of good type and contrast with the bulk of the older dwellings which have outlived their day. The explanation of the housing conditions is to be found in the local history. Mortimer, in 1847, wrote :—

> "The flatness of the country and the prevalence of sea breezes, which prevent the growth of timber, have given the parish a very naked and cheerless appearance, which may, in some measure, account for its having been for centuries deserted by nearly all its principal landowners."

Sulley, in 1885, wrote :—

> "Throughout the middle ages and until the present century, Neston was the most important place in Wirral, and the seat of the administration of justice."

He describes how it rose to be a "great commercial centre and coaching station" and how "gradually the place waned and dropped away." Even when Sulley wrote he mentioned that "it is by far the largest and most important of all the townships outside the range and influence of Liverpool." To-day, it is easily within the range of that city and so its recent growth was originated by Liverpool influence, and all the newer residences and cottages have an intimate relationship to the growth of Liverpool. The description of the older cottages written for the last survey report in the main holds good, viz :—Many of the houses were erected prior to the period of passing and enforcing byelaws. As a consequence, much of the property is old, poorly constructed, without damp courses, and from the standpoint of to-day, possessing all the defects which characterise unfit dwellings. Examined in the light of standards of fitness as stated in the official manual :—

1. They are not free from serious dampness.
2. They are not satisfactorily lighted and ventilated.
3. They are not properly drained and provided with adequate sanitary conveniences, and with a sink and suitable arrangements for disposal of slop water.
4. They are not in good general repair.
5. They have not adequate washing accommodation.
6. They have not adequate facilities for preparing and cooking food.
7. They have not well ventilated stores for food.

The most that can be said for them is that they have a copious supply of good water, and they are let at rentals very little above a nominal figure. The period has not been without progress, for the supply of adequate sanitary conveniences and suitable arrangements for disposal of slop water have made the conditions of habitation less unsatisfactory. Money would simply be thrown away in any attempt to preserve some of the cottages and the remedy is more extensive building and demolition to complete the ravages of time.

(2) (*a*) Extent of Shortage or Excess of Houses.—For some years there has not been a vacant cottage in the district, but in any calculation of shortage, consideration must be

given to the number of houses which would be dealt with by closing and demolition orders. The estimate of a shortage of 100 cottages which was made in 1920, is still approximately correct.

(*b*) The Council has, as a first step in remedying housing conditions, 24 cottages almost completed. It is anticipated that further building will be carried out by the Council, to an extent of at least 26 more.

(3) In the period under review, coal mining conditions have been so bad that there has been an exodus of miners from the area, but, notwithstanding the resultant decrease in the population, house shortage does not appear to be lessened to any appreciable degree.

2. Overcrowding.

(1) Extent.—At the 1921 census, there were 1.13 rooms for each individual in the population. The figures for the rooms per person in each ward were as follows :—

Leighton and Parkgate	1.31
Little Neston	0.94
Neston	1.17

49	dwellings	had an	accommodation	of	1—3 rooms.
575	,,	,,	,,	,,	4—5 rooms
231	,,	,,	,,	,,	6—8 rooms
111	,,	,,	,,	,,	9 or more rooms

There were 2 families in each of 274 houses and 3 or more families in 69. Cottages which have been built since the date of the census do little to alleviate the position as they are not of the type which permit occupation by the poorer members of the community.

(3) Measures Taken or Contemplated for Dealing with Overcrowding.—The Council's scheme, when completed, will lessen overcrowding.

(4) No action has been taken during 1925, nor has any action been practicable or expedient, to lessen overcrowding.

Principal Cases :—

Number of Families in House.	Bedroom Accommodation.	Occupants. Adults.	Children.	Total.
2	2	8	5	13
1	2	5	5	10
1	2	2	7	9
1	2	6	6	12
2	3	8	3	11
1	3	5	5	10
1	2	4	5	9
1	2	4	5	9
1	2	6	4	10
2	2	8	4	12
1	2	5	7	12
2	3	6	6	12
2	2	7	5	12
3	4	8	9	17
2	2	4	10	14
2	3	5	9	14
1	2	4	7	11
2	2	4	6	10

3. **Fitness of Houses.**

(1) (*a*) General Standard of Housing in the Area.—The two standards have been mentioned, one of a high character and the other very low ; and the explanation has been given in previous paragraphs.

(*b*) and (*c*) are answered in previous paragraphs, for in many instances neither landlord nor tenant can alter existing conditions.

(2) General Action Taken as regards Unfit Houses under (*a*).—The Public Health Acts—a certain amount of work has been accomplished.

(*b*) The Housing Acts—Throughout 1925, negotiations with the Colliery Company were carried on and notices served to remedy defects in the Colliery cottages. The financial position of the mining industry prevented the enforcement of the notices with vigour enough to get the work done. The hands employed were too few and the employment was too

irregular to obtain satisfactory results. An increased number of men are now at work on the cottages.

4. **Unhealthy Areas.**

Technically, there are none, but there are small groups of houses to be demolished as soon as cottages are available for the occupants.

5. **Byelaws** have been revised.

Housing Statistics for the year 1925.

Number of new houses erected during the year :—

(*a*)	Total including numbers given separately under (*b*) completed	23
(*b*)	With State asistance under the Housing Acts	
	(i.) By Local Authority	Nil
	(ii.) By other bodies or persons ...	12

1. **Unfit Dwelling Houses.—**

Inspection—

(1)	Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts)	130
(2)	Number of dwelling houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910, or the Housing Consolidated Regulations, 1925	33
(3)	Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	1
(4)	Number of dwelling houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	64

2. **Remedy of Defects without Service of Formal Notice.**

	Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority or their officers	31

3. Action under Statutory Powers.

A. Proceedings under Section 3 of the Housing Act, 1925

(1) Number of dwelling houses in respect of which notices were served requiring repairs 31

(2) Number of dwelling houses which were rendered fit after service of formal notices :—

(*a*) By Owners Nil

(*b*) By Local Authority in default of owners Nil

(3) Number of dwelling houses in respect of which Closing Orders became operative in pursuance of declaration by owners of intention to close ... Nil

B. Proceedings under Public Health Acts :—

(1) Number of dwelling houses in respect of which notices were served requiring defects to be remedied 64

(2) Number of dwelling houses in which defects were remedied after service of formal notices :—

(*a*) By Owners 31

(*b*) By Local Authority in default of owners Nil

C. Proceedings under Sections 11, 14 and 15 of the Housing Act, 1925.

(1) Number of representations made with view to making Closing Orders 1

(2) Number of dwelling houses in respect of which Closing Orders were made 1

(3) Number of dwelling houses in respect of which Closing Orders were determined, the dwelling house having been rendered fit Nil

(4) Number of dwelling houses in respect of which Demolition Orders were made Nil

(5) Number of dwelling houses demolished in pursuance of Demolition Orders 1

Prevalence of, and Control over, Infectious Diseases.

The prevalence of infectious diseases during the period 1921-25 is shown in the following table which gives the attack rate per 1,000 of the population.

Year	Small Pox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Puerperal Fever.	Erysipelas.
1921	0.00	1.55	1.75	0.19	0.00	0.00
1922	0.00	1.54	0.77	0.00	0.19	0.00
1923	0.00	1.72	2.68	0.00	0.00	0.00
1924	0.00	0.55	2.01	0.00	0.00	0.00
1925	0.00	0.55	0.00	0.00	0.18	0.00

The corresponding rates for England and Wales are as follows :—

Year	Small Pox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Puerperal Fever.	Erysipelas.
1921		3.64	1.76	0.10	0.06	0.35
1922		2.85	1.37	0.06	0.06	0.35
1923		2.24	1.05	0.08	0.06	0.32
1924		2.16	1.07	0.11	0.06	0.33
1925	0.14	2.36	1.23	0.07	0.06	0.39

3. Notifiable Diseases during the Year 1925.

Disease.	Total Cases Notified	Cases Treated in Hospital	Total Deaths.
Diphtheria	—	—	—
Scarlet Fever	3	3	—
Erysipelas	—	—	—
Puerperal Fever	1	1	1
Encephalitis Lethargica ...	—	—	—
Acute Poliomyelitis ...	—	—	—
Pneumonia	21	9	4
Totals - -	25	13	5

Diphtheria was not notified during 1925 and only three cases of Scarlet Fever occurred. Pneumonia was prevalent and caused four deaths.

Table of Age Groups Showing Total Cases and Deaths, 1925.

Disease		Total Cases.	Total.		0-1		1-2		2-3		3-4		4-5		5-10		10-15		15-20		20-35		35-45		45-65		65 up	
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Total Cases	...	25	12	13	...	...	1	3	...	...	...	1	2	1	3	2	...	...	...	2	3	3	1	...	1	...	1	1
Total Deaths	...	5	2	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	2	...	...	...	...	1	1
Small Pox	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	Cases	3	1	2	...	...	...	...	...	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever (including P'typhoid)	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia	Cases	21	11	10	...	...	1	3	...	...	...	1	2	...	2	1	...	...	...	2	3	2	1	...	1	...	1	1
	Deaths	4	2	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	1	1
Puerperal Fever	Cases -	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
	Deaths	...1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...

Table of Age Groups Showing Total Cases and Deaths, 1921-1925.

Disease.		Total Cases	Total		0-1		1-2		2-3		3-4		4-5		5-10		10-15		15-20		20-35		35-45		45-65		65up	
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Total Cases ...	...	151	85	66	...	1	4	5	1	2	1	7	9	1	24	16	14	6	5	5	15	11	3	3	6	6	3	3
Total Deaths ...	...	21	12	9	1	1	3	...	...	...	1	...	...	...	1	...	...	1	1	...	...	2	...	1	3	2	2	2
Small Pox	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	Cases	30	10	20	...	...	...	...	...	1	...	3	1	1	4	8	5	4	...	1	...	2	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria	Cases	37	24	13	...	...	...	...	...	1	...	3	2	...	14	6	5	2	2	...	1	1	...	...	...	...	...	...
	Deaths	2	2	...	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever (including paratyphoid)	Cases	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia	Cases	68	41	27	...	...	4	5	1	...	1	1	4	...	3	2	1	...	3	4	12	5	3	3	6	4	3	3
	Deaths	17	10	7	1	1	3	...	...	...	...	...	...	...	...	...	...	1	1	...	...	1	...	1	3	1	2	2
Puerperal Fever	Cases	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...
	Deaths	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
Cerebro Spinal Fever	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Poliomyelitis	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Polio-encephalitis	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica	Cases	4	2	2	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	1	...	...	...	1	...	...
	Deaths	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Dysentery	Cases	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
	Deaths	...		...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	Cases	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Malaria	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chicken Pox	Cases	7	6	1	...	1	...	...	...	...	...	...	2	...	3	...	1	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Table Showing Distribution of Total Cases of Notifiable Diseases 1925.

Diseases.	District.			Total Cases
	Neston.	L. Neston.	Parkgate.	
Small Pox	—	—	—	—
Diphtheria	—	—	—	—
Scarlet Fever	1	1	1	3
Enteric Fever	—	—	—	—
Pneumonia	15	4	2	21
Erysipelas	—	—	—	—
Puerperal Fever	1	—	—	1
Polio-Encephalitis	—	—	—	—
Encephalitis Lethargica ...	—	—	—	—
Cerebro Spinal Meningitis ...	—	—	—	—
Poliomyelitis	—	—	—	—
Pulmonary Tuberculosis ...	4	3	2	9
Non-Pulmonary Tuberculosis	3	—	1	4
Totals	24	8	6	38

Tuberculosis.

Age Periods	NEW CASES.				DEATHS.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
Years								
0	—	—	—	—	—	—	—	—
1	—	—	—	—	—	—	—	1
5	—	—	2	1	—	—	—	—
10	—	—	—	1	—	—	1	—
15	—	1	—	—	—	1	—	—
20	—	1	—	—	—	—	—	—
25	—	2	—	—	—	1	—	—
35	—	1	—	—	—	—	—	—
45	1	—	—	—	1	—	—	—
55	2	—	—	—	2	—	—	—
65 and upwards ...	1	—	—	—	1	—	—	—
Totals ...	4	5	2	2	4	2	1	1

One of the non-pulmonary cases was unnotified, but the patient was a mentally defective child residing in an institution outside the district and may have been notified in its place of

residence. The other non-pulmonary case was notified after death from a hospital. All the pulmonary cases had been notified—one five months before death, two four months, one two months, one just over a month and one five days.

1925.

	Cases.			Vision unimpaired.	Vision impaired.	Total Blindness.	Deaths.
	Notified	Treated.					
		At Home.	In Hospital.				
OPHTHALMIA NEONATORUM	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.	Nil.

1921—1925.

6	6	Nil.	6	Nil.	Nil	Nil.

Wirral Rural District.

——:o:——

1. General Statistics.

Area (acres)	36,761
Population (1921)	24,753
Population Estimated (1925)	29,170
Number of inhabited houses (1921)	4,809
Number of families or separate occupiers (1921) ...	4,993
Rateable value	£246,754
Sum represented by penny rate	£900

Social Conditions and Chief Occupations.—These are shown in the following table from the 1921 census volume.

Occupation.	Males.	Females.
Total Population	11,432	13,321
Aged 0-11	2,791	2,622
Aged 12 and upwards	8,641	10,699
I. Fishermen	16	0
II. Agricultural Occupations	1,822	120
III. Mining and Quarrying Occupation	63	0
IV. Makers of Coke, Lime, Cement, etc.	3	1
V. Makers of Bricks, Pottery, Glass	9	7
VI. Workers, in Chemicals, Paints, etc.	101	37
VII. Metal Workers	476	6
VIII. Workers in Precious Metals	0	1
IX. Electrical Apparatus Makers, Fitters, etc. ...	66	3
X. Makers of Watches, etc.	9	0
XI. Workers in Skins ; Leather Goods Makers ...	8	1
XII. Textile Workers	8	7
XIII. Makers of Textile Goods and Articles of Dress	55	139
XIV. Makers of Foods, Drinks and Tobacco ...	96	37
XV. Workers in Wood, etc.	281	4
XVI. Paper Workers ; Printers, etc.	26	29
XVII. Builders, Bricklayers, etc.	362	0
XVIII. Painters and Decorators	77	0
XIX. Workers in other Materials	3	0
XX. Workers in Mixed and Undefined Materials ...	62	6
XXI. Persons in Gas, Water, Electricity Supply ...	21	0
XXII. Transport Workers	856	47
XXIII. Commercial and Financial Occupations ...	915	254
XXIV. Public Administration and Defence	116	34
XXV. Professional Occupations	304	380
XXVI. Persons Employed in Entertainments, etc. ...	47	15
XXVII. Persons Employed in Personal Service ...	155	2,080
XXVIII. Clerks, Draughtsmen, Typists, etc.	437	250
XXIX. Warehousemen, etc.	55	37
XXX. Stationary Engine Drivers, etc.	79	0
XXXI. All other occupations	610	21
Total Occupied	7,138	3,516
XXXII. Unoccupied and Retired	1,503	7,183
Total Occupied and Unoccupied	8,641	10,699

The figures in the preceding table include :—

	Males.	Females.
Farmers	282	... 36
Farmers' Sons, etc.	104	... 26
Gardeners	633	... 26
Agricultural Labourers	660	... 25
Makers of Paints, Oils, Grease, etc.	56	... 27
Boiler Makers and their Labourers	48	... —
Ship Builders	44	... —
Railway Workers	166	... —
Seamen, etc.	112	... —
Domestic Servants	—	... 1,868

The natural increase (that is the excess of births over deaths) of the population is shown in the following table (1921-1925).

Year.	Population	Natural Increase per 1,000 population.
1921	24,220	9.4
1922	24,980	7.8
1923	25,990	8.9
1924	27,900	6.9
1925	29,170	7.3

2. Extracts from Vital Statistics of the Year 1925.

These statistics are calculated on the population of 29,170 supplied by the Registrar General. The population is estimated to have increased by 1,270 during the year.

Births.

	Total.	Males.	Females.
Legitimate ...	499	267	232
Illegitimate ...	19	10	9
	518	277	241

Birth Rate (R.G.) 17.7.

Table of Number of Births and Birth Rates, 1920-1924.

Year.	Number.	Birth Rate.
1920	417	18.9
1921	429	17.7
1922	415	16.6
1923	447	17.2
1924	478	17.1

The average number of births per annum in the years 1920-1924 was 437.

Deaths.

Total, 305 ... Males 145 ... Females 160

Death Rate (R.G.) 10.4. The standardised death rate was 10.3.

Table of Number of Deaths and Death Rates, 1920-1924.

Year.	Number.	Death Rate.
1920	215	9.7
1921	202	8.3
1922	221	8.8
1923	216	8.3
1924	284	10.1

The average number of deaths per annum in the years 1920-1924 was 227.

43.6% of the deaths occurred in the age periods over 65 years and upwards.

Number of women dying in, or in consequence of—

Childbirth (from Sepsis)	2
,, (from other causes)	3

Deaths of infants under one year of age per 1,000 births, 52.1. Legitimate 25. Illegitimate 2. Total 27.

Table of Infantile Mortality, 1920-1924.

Year.	Rate per 1,000 Births.
1920	67.0
1921	55.9
1922	45.7
1923	40.2
1924	69.0

Deaths from Measles (all ages)	7
Deaths from Whooping Cough (all ages)	4
Deaths from Diarrhœa (under 2 years of age)	7

In the preceding 5 years there were 7 deaths from Measles, 10 from Whooping Cough, and 11 (under 2 years of age) from Diarrhœa.

Causes of Death.

All Causes.		Males.	Females.
1.	Enteric Fever	0	0
2.	Small Pox	0	0
3.	Measles	4	3
4.	Scarlet Fever	0	1
5.	Whooping Cough	2	2
6.	Diphtheria	0	0
7.	Influenza	2	4
8.	Encephalitis Lethargica	0	1
9.	Meningococcal Meningitis	1	0
10.	Tuberculosis of Respiratory System	9	11
11.	Other Tuberculous Diseases	1	4
12.	Cancer, Malignant Disease	17	17
13.	Rheumatic Fever	0	0
14.	Diabetes	0	1
15.	Cerebral Hæmorrhage, &c.	9	11
16.	Heart Disease	23	20
17.	Arterio Sclerosis	7	11
18.	Bronchitis	8	13
19.	Pneumonia (All forms)	14	6
20.	Other Respiratory Diseases	2	2
21.	Ulcer of the Stomach or Duodenum	2	0
22.	Diarrhœa, &c. (under 2 years)	5	2
23.	Appendicitis and Typhlitis	4	0
24.	Cirrhosis of Liver	1	0
25.	Acute and Chronic Nephritis	0	4
26.	Puerperal Sepsis	0	2
27.	Other Accidents and Diseases of Pregnancy and Parturition	0	3
28.	Congenital Debility and Malformation, Premature Birth	9	4
29.	Suicide	0	1
30.	Other Deaths from Violence	6	6
31.	Other Defined Diseases	19	31
32.	Causes Ill-defined or Unknown	0	0
	Totals	145	160

Hospitals provided or subsidised by the Local Authority or by the County Council—*See under North West Cheshire p* 23.

Clinics and Treatment Centres.—Infant Welfare Centres of County Council at Heswall and at Moreton.

Public Health Staff :—

One Inspector who has the certificate of the Royal Sanitary Institute and a certificate in Meat Inspection.

One Assistant Inspector who is also Assistant Surveyor, employed mainly on temporary building inspection. He has the certificate of the Royal Sanitary Institute.

PROFESSIONAL NURSING IN THE HOME :—

(*a*) General. District nurses in most of the larger villages maintained by voluntary organisations.

(*b*) For Infectious Diseases. Nil.
Measles. Nil.

MIDWIVES.—There are 11 midwives practising in the district. 9 have certificates.

CHEMICAL WORK.—*See under North West Cheshire p* 25.

List of Adoptive Acts, Bye-Laws, and Regulations.

ADOPTIVE ACTS.

Infectious Disease (Prevention) Act, 1890, adopted 7th January, 1891.

Public Health Acts (Amendment) Act, 1890, adopted 4th February, 1891.

Public Health Acts (Amendment) Act, 1890 (part 4) 24th January, 1924.

The Council has been invested with powers under certain sections of the Public Health Acts (Amendment) Act, 1907, by order of the Local Government Board, dated 10th March, 1911.

Private Street Works Act 1892 (Heswall and Moreton), 16th March 1925.

Small Dwellings Acquisition Acts, 1899-1923.

BYE-LAWS.

With respect to—

(1) Nuisances made 6th June, 1898 (allowed by the Local Government Board, 9th September, 1898).

(2) Common Lodging Houses, 1898 (allowed by the Local Government Board, 9th September, 1898).

(3) The Cleansing of Footways and Pavements, the removal of House Refuse, and the Cleansing of Earth Closets, Privies, Ashpits and Cesspools (allowed by the Local Government Board, 9th September, 1898).

(4) Hackney Carriages (Rural District), made 2nd December, 1901 (allowed by the Local Government Board, 13th January, 1902).

(5) Omnibus (Eastham and Hooton only), allowed by the Local Government Board, 13th January, 1902).

(6) New Streets and Buildings, made 20th March, 1911 (allowed by the Local Government Board, 12th May, 1911).

(7) Tents, Vans, Sheds, &c., made 20th December 1920 (allowed by Local Government Board, 1921).

(8) New Buildings, the removal of House Refuse. and the cleansing of Earth-closets, Privies and Ashpits, and with respect to Tents, Vans, Sheds and similar structures used for Human Habitation, made 5th April, 1923.

(9) With respect to Buildings and certain matters in connection therewith, made 12th January, 1925.

(10) For the Regulation of Offensive Trades, made 8th January, 1925.

(11) Slaughter-houses, made 21st November, 1921 (allowed by Ministry of Health, 7th April, 1922).

(12) Regulations under Dairies, Cowsheds and Milkshops Order, 1885, made 6th June, 1898.

(13) Omnibus (whole Rural District) 15th January, 1924.

Sanitary Circumstances of the Area.

WATER.—One Parish derives its supplies from Birkenhead, viz.: Bidston; six parishes are supplied from the works of the Hoylake and West Kirby Council, viz.: Caldy, Moreton, Saughall Massie, Frankby, Greasby and Grange; and the remaining twenty-eight parishes obtain water from the works of the West Cheshire Water Board (see under North West

Cheshire, page 26). The Water Board succeeds to the obligation, imposed by Parliament upon the West Cheshire Company, to soften water delivered from the Hooton well. In the 1924 Annual Report, the increasing liability of surface wells to be polluted by percolating sewage from leaky cesspools with the growth of unsewered areas was discussed. During 1925, attention has been directed to the surface wells where obvious possibilities of contamination have been present and analyses of these waters have been brought before the Council. Persuasion and pressure has been exerted upon the owners to discontinue their use and to instal a sound supply wherever mains are within reasonable distance. Two miles of watermains were laid in 1925.

Rivers and Streams.—Three valleys converge at Raby Mere and each has a stream running through it. Some of the streams are dignified with names, *e.g.*, Fender, Birket, Greasby and Arrowe Brooks. They receive effluents from purification works and overflows from cesspools. The waters of the Birket and Arrowe are foul.

Drainage and Sewerage.—Rapid development of the Rural Area calls for constant extension of sewers. A cesspool may still be a satisfactory method of draining a solitary house, but even this proposition is doubtful unless it can be constructed so as to deal with bath waste. There can be no doubt that drainage to cesspools is not a practicable suggestion where groups of dwellings are aggregated into hamlets, villages and towns. Nuisance is bound to arise within a short time of the the cesspools being brought into use. Experience shows that attempts to instal small septic tanks and bacteria beds for individual houses result in the retention of a certain amount of solids, but foul effluents flow from them. The radical method is for the Local Authority to provide sewers and compel connection of the houses to them. Unfortunately, the cost of this procedure is prohibitive for small areas. The position in Wirral is that Willaston, Childer Thornton, Hooton, Eastham, Great Sutton, Little Sutton, Caldy, Gayton, part of Heswall, Prenton, Noctorum, Upton, Bidston, part of Moreton, Thornton

Hough, Spital and part of Grange are sewered. Sewage from Spital passes through the Bebington sewers and from part of Grange through the Hoylake sewers. The Fender Valley Outfall Sewer receives the sewage of Prenton, Noctorum, part of Upton, Bidston and part of Moreton. Gayton, part of Eastham and part of Willaston have small installations, and for the other townships mentioned there are combined works (part of Eastham, Childer Thornton, Hooton, part of Willaston, Great Sutton, Little Sutton, Caldy, Heswall) or discharge into tidal waters. The village of Burton has a private scheme. In 1925 application was made to the Ministry of Health for sanction to borrow money for the purpose of constructing sewers and sewage disposal works for Arrowe, Bidston, Frankby, Grange, Greasby, Irby, Moreton, Saughall Massie and Upton. Application is pending to borrow for like works in Pensby, Barnston, Heswall, and Thingwall. The townships which will remain unsewered if the present plans be carried to fruition will be Woodchurch, Landican, Storeton, Puddington, Ledsham, Ness, Raby, Thurstaston and Brimstage. This would represent an unsewered area of about 9,709 acres out of a total of 36,761, and a population of about 2,500 out of about 29,000. Nearly five miles of sewer extensions were constructed in 1925.

Closet Accommodation.—All new houses have water closets, but many old cottages still have privy middens. Abolition of this insanitary form of closet accommodation should be enforced wherever the cottages are within reach of a sewer. Nearly 100 privies have been converted to W.C.'s in the last five years.

Scavenging.—Scavenging is carried out by contract in townships where the inhabitants desire this to be done, viz. : Bidston, Childer Thornton, Eastham, Great Sutton, Little Sutton, Prenton, Heswall, Thornton Hough, Upton, Noctorum, Moreton, Ness, Barnston. A private arrangement exists between householders and a contractor in Willaston. Ultimate disposal is on agricultural land ;—sometimes by attempting to fill ponds—a procedure which invariably leads to complaint of nuisance.

Sanitary Inspection of the Area.

The Inspectors supply the two following reports :—

Tabular Summary of the Work of the Sanitary Department.

A. Nature of Inspections.	Number.	B. Notices Served		C. Result of Service of Notices.			
		Statutory.	Informal.	Complied wth.	Remaining in Hand.	Prosecutions. Instituted.	Prosecutions. Pending.
Dwelling Houses	2,017	—	23	20	3	—	—
Courts, Yards, Passages	4	—	4	4	—	—	—
Privy Middens	6	—	6	6	—	—	—
Cesspools	12	2	12	14	—	—	—
Ditches, Watercourses, etc.	9	—	9	9	—	—	—
Offensive Accumulations	8	—	8	8	—	—	—
Slaughter Houses	311	—	2	2	—	—	—
Other Places where Food is sold ...	20	—	2	2	—	—	—
Piggeries	16	—	3	3	—	—	—
Dairies	23	—	—	—	—	—	—
Cowsheds	225	—	4	3	1	—	—
Milkshops	10	—	2	—	—	—	—
Factories	4	—	—	—	—	—	—
Workshops	48	—	3	3	—	—	—
Workplaces	70	—	—	—	—	—	—
Outworkers	—	—	—	—	—	—	—
Bakehouses	24	2	—	2	—	—	—
Smoke Observations	8	—	4	4	—	—	—
Infectious Diseases, Inquiries and Re-visits	221	—	—	—	—	—	—
Rooms Disinfected	223	—	—	—	—	—	—
Caravans Disinfected	33	—	—	—	—	—	—

Number of Tents, Vans, Sheds and Similar Structures in the District for the year ending December 31st, 1925.

Parish.	Tents.	Vans, Sheds and Similar Structures.	Total.
Moreton	226	1,980	2,206
Saughall Massie	9	65	74
Upton	20	80	100
Greasby	15	17	32
Grange	—	10	10
Caldy	—	3	3
Frankby	5	7	12
Thurstaston	18	32	50
Heswall	40	63	103
Barnston	—	13	13
Gayton	—	7	7
Irby	35	47	82
Thingwall	6	35	41
Great and Little Sutton ...	4	10	14
Eastham	—	13	13
Ness	—	11	11
Raby Dell	—	2	2
Burton	—	3	3
	378	2,398	2,776

Temporary Buildings.

Annual Report for the year ending 31st December, 1925.

Number of Notices Served	Notices complied with	Buildings Approved Subject to Council's Requirements	Buildings Removed by Order of the Council	Plans Approved Subject to Council's Requirements	Plans Disapproved	Renewal of Licenses	Number of Persons Proceeded Against and Convicted	Total Fines including Costs	Cases Withdrawn	Cases Pending	Cases in Hand
94	81	15	53	10	6	23	18	£47/11/3	2	4	9

NOTE.—The above figures of 18 and the amount of £47/11/3 are made up as follows :—

Parish.	Fines including costs.	£	s.	d.
Moreton	11 ...	25	6	0
Upton	1 ...	2	0	0
Barnston	4 ...	19	15	3
Heswall	1 ...	0	5	0
Little Sutton	1 ...	0	5	0
	18 ...	£47	11	3

SCHOOLS.—All the Public Elementary Schools are supplied with piped water. Bins are provided in ten and ashpits in eight of them. There are water closets in fourteen, pail closets in one, and privies in three.

Housing.

1. General Housing Conditions of the Area.

(1) The general housing conditions are good so far as they refer to houses which comply with orthodox and approved methods of construction, but in some townships there are groups of makeshift dwellings which emulate the parallel devices of Lower Moreton.

(2) (*a*) EXTENT OF SHORTAGE OR EXCESS OF HOUSES.—The absence of empty houses indicates that there is no excess of houses; it is more difficult to assess the shortage, unless it be assumed that one house should be allotted to each family. Certain parishes, viz: Arrowe, Bidston, Brimstage, Burton, Frankby, Hooton, Landican, Ledsham, Spital, Puddington, Raby, Storeton and Woodchurch have not been invaded by, or only to a limited extent by, the ingress of newcomers, and the progress of building. In these parishes, the housing accommodation is probably equivalent to the needs of the population. Out of 161 houses in Wirral visited for the definite purpose of determining whether the occupants were members of one family or not, 13% were occupied by two families and 1.8% by three families.

(*b*) MEASURES TAKEN OR CONTEMPLATED TO MEET ANY SHORTAGE.—It is anticipated that private enterprise will secure the adjustment of housing and population.

(3) INFORMATION as to any important changes in population during the period under review or anticipated in the future.—The impulse given to the growth of Wirral by the increase of facilities to reach desirable sites does not seem by any means to have exhausted its force and appears to be going on in increasing volume which is bound to be still further intensified by the construction of the tunnel to the Lancashire side of the Mersey.

Overcrowding.

(1) EXTENT.—At the Census, the only places which had less than one room per person were Moreton (0.87) and Storeton (0.84). Frankby had 2.82 rooms per person.

(2) CAUSES.—Failure of building to keep pace with immigration and economic conditions precluding the separation of families.

(3) Measures taken or contemplated for dealing with overcrowding.—Nil.

(4) Principal cases of overcrowding during 1925 and action taken.—No action has been taken owing to the impossibility of obtaining any practical result from prosecutions in an area where no alternative accommodation was available.

The following are examples of existing conditions selected largely from groups of houses where overcrowding was anticipated to exist.

Parish.	Accommodation.	Occupants.
Childer Thornton ...	2 bedrooms ...	4 adults 4 children
Little Sutton ...	3 bedrooms ...	5 adults 3 children
Little Sutton ...	4 bedrooms ...	7 adults 3 children
Little Sutton ...	3 bedrooms ...	7 adults
Little Sutton ...	3 bedrooms ...	4 adults 6 children
Newton ...	3 bedrooms ...	8 adults
Hooton ...	3 bedrooms ...	4 adults 3 children
Eastham ...	2 bedrooms ...	4 adults 1 child
Eastham ...	3 bedrooms ...	6 adults 1 child
Eastham ...	2 bedrooms ...	3 adults 7 children
Willaston ...	2 bedrooms ...	6 adults 1 child
Willaston ...	2 bedrooms ...	3 adults 2 children
Moreton ...	2 bedrooms ...	6 occupants
Moreton ...	2 bedrooms ...	6 occupants
Moreton ...	3 bedrooms ...	8 occupants
Moreton ...	3 bedrooms ...	10 occupants
Moreton ...	3 bedrooms ...	10 occupants
Greasby ...	2 bedrooms ...	6 adults 4 children
Greasby ...	3 bedrooms ...	5 adults 3 children
Greasby ...	3 bedrooms ...	3 adults 4 children

Parish.	Accommodation.	Occupants.
Greasby	... 3 bedrooms	... 7 adults 1 child
Upton	... 2 bedrooms	... 8 adults
Upton	... 2 bedrooms	... 4 adults 4 children
Upton	... 2 bedrooms	... 6 adults 1 child
Upton	... 3 bedrooms	... 4 adults 5 children
Upton	... 2 bedrooms	... 5 adults 4 children
Woodchurch	... 2 bedrooms	... 4 adults 3 children
Heswall	... 2 bedrooms	... 5 adults 3 children
Heswall	... 2 bedrooms	... 4 adults 1 child

3. Fitness of Houses.

(1) (*a*) General Standard of Housing in the Area.—Good, with the limitations previously expressed under general housing conditions.

(*b*) General Character of Defects found to exist in Unfit Houses.—The Inspector's summary in his report for 1925 gives a fair view of the defects, viz :

Defective Drains	37
Defective Roofs	6
Defective Floors	3
Defective Brickwork	2
Defective Wall Plaster	10
Defective Yards	4
Defective Cesspools	12

(2) General action as regards unfit houses under—

(*a*) The Public Health Acts.—Most of the work is accomplished under these Acts.

(*b*) The Housing Acts.—641 houses have been inspected and their condition recorded under the Housing Regulations 1910, in the last five years.

(3) No special difficulties have been encountered in remedying unfitness.

(4) Delays in extension of water mains have occurred when new property has been erected at a distance from existing mains and where an insufficient financial return would accrue to the water undertakings.

4. Unhealthy Areas.

See special report on Lower Moreton, page 162.

5. There appears to be no need for new byelaws nor for revision of existing byelaws.

6. The Council has issued circulars urging householders to dispose of household refuse as far as possible by burning.

Houses completed 1925.

Parish.	Number
Barnston	13
Bidston	1
Burton	3
Caldy	2
Childer Thornton	3
Eastham	1
Frankby	4
Gayton	7
Grange	22
Greasby	7
Heswall	42
Hooton	2
Irby	28
Ledsham	2
Moreton	130
Ness	2
Noctorum	10
Pensby	2
Spital	11
Prenton	21
Puddington	1
Raby	1
Saughall Massie	14
Great Sutton	4
Little Sutton	13
Thingwall	6
Thurstaston	1
Upton	48
Willaston	16

No building took place in Arrowe, Brimstage, Landican, Storeton, Thornton Hough and Woodchurch.

Housing Statistics for the Year 1925.

Number of new houses erected during the year :—

(*a*) Total (including numbers given separately under (*b*) 417

(*b*) With State assistance under the Housing Acts

(i). By the Local Authority Nil

(ii.) By other bodies or persons 94

1. Unfit Dwelling Houses.

Inspection—

(1) Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts) (General Inspections) 2,017

(2) Number of dwelling houses which were inspected and recorded under the Housing (Inspection of District) Regulations, 1910, or the Housing Consolidated Regulations, 1925. 466

(3) Number of dwelling houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation Nil

(4) Number of dwelling houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation 95

2. Remedy of Defects without Service of Formal Notice.—

Number of defective dwelling houses rendered fit in consequence of informal action by the Local Authority or their Officers 17

3. Action Under Statutory Powers.

A. Proceedings under Section 3 of the Housing Act, 1925.

(1) Number of dwelling houses in respect of which notices were served requiring repairs Nil

(2) Number of dwelling houses which were rendered fit after service of formal notices :—

(*a*) By Owners Nil
(*b*) By Local Authority in default of owners Nil

(3) Number of dwelling houses in respect of which Closing Orders became operative in pursuance of declarations by owners of intention to close ... Nil

B. Proceedings under Public Health Acts.

(1) Number of dwelling houses in respect of which notices were served requiring defects to be remedied 78

(2) Number of dwelling houses in which defects were remedied after service of formal notices :—

(*a*) By owners 73
(*b*) By Local Authority in default of owners Nil

In hand 5

C. Proceedings under Sections 11, 14 and 15 of the Housing Act, 1925.

(1) Number of representations made with view to making Closing Orders Nil

(2) Number of dwelling houses in respect of which Closing Orders were made Nil

(3) Number of dwelling houses in respect of which Closing Orders were determined, the dwelling house having been rendered fit Nil

(4) Number of dwelling houses in respect of which Demolition Orders were made Nil

(5) Number of dwelling houses demolished in pursuance of Demolition Orders Nil

Inspection and Supervision of Food.

(*a*) Milk Supply.—The registers show that 22 persons are designated Milk Purveyors and 13 Milk Producers. Many of the old established firms have not had their names registered, a revision of the registers is in progress. Milk from the rural area is supplied to the neighbouring Urban Districts and Boroughs. The Dairies, Cowsheds and Milkshops Orders are carried out. Three persons have licenses for the production of milk under special designations, viz : one Grade A (tuberculin tested) and two Grade A.

(*b*) Meat.—The carcases of all animals slaughtered for food are examined prior to sale to the public. The Public Health (Meat) Regulations, 1924, are carried out. A total of 7,813 lbs. of meat was found unfit for human consumption and condemned.

Slaughter Houses.—

	In 1920.	In Jan., 1925.	In Dec., 1925.
Registered	4	4	4
Licensed	2	1	2

There are fifteen purveyors of meat in the district.

(*c*) Other Foods.—All the larger villages have modern well-constructed bakehouses which are kept in good order. There is one underground bakehouse. Premises where food is manufactured, prepared, stored, or exposed for sale, are in the main well adapted for the purpose and kept in a wholesome state.

(*d*) Food Poisoning.—One suspected outbreak of a minor character affecting two individuals in one household was reported and investigated. On the whole the evidence tended to prove that the suspected food was not the cause of the symptoms complained of.

Sale of Food and Drugs Acts.

Particulars of Samples forwarded to the Public Analyst from the district during the year ending 31st December, 1925.

Name of Sample.	Number Analysed.	Number of Samples Certified as Adulterated or not up to Standard.
Butter	11	—
Cheese, Cheshire	4	—
Cheese, Gruyere	2	—
Cream	2	—
Cream, Preserved	2	—
Ginger	1	—
Lard	5	—
Milk	20	—
Milk, Condensed	2	—
Olive Oil	1	—
Pepper	1	—
Totals - -	51	—

Prevalence of, and Control over, Infectious Diseases.

Infectious Diseases Generally.

The prevalence of infectious diseases in the period 1921-25 is shown in the following table which gives the case rate per 1,000 of the population.

Year.	Small Pox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Puerperal Fever.	Erysipelas.
1921	0.00	2.35	0.95	0.25	0.00	0.12
1922	0.00	3.48	1.00	0.00	0.00	0.28
1923	0.00	1.92	0.62	0.04	0.12	0.27
1924	0.00	2.26	0.25	0.14	0.11	0.21
1925	0.00	3.08	0.85	0.03	0.10	0.13

The following table shows the corresponding rates for England and Wales.

Year.	Small Pox.	Scarlet Fever.	Diphtheria.	Enteric Fever.	Puerperal Fever.	Erysipelas.
1921	0.00	3.64	1.76	0.10	0.06	0.35
1922	0.00	2.85	1.37	0.06	0.06	0.35
1923	0.00	2.24	1.05	0.08	0.06	0.32
1924	0.00	2.16	1.07	0.11	0.06	0.33
1925	0.14	2.36	1.23	0.07	0.06	0.39

Table of Age Groups Showing Total Cases and Deaths, 1921-25.

Disease.		Total Cases	Total.		0-1		1-2		2-3		3-4		4-5		5-10		10-15		15-20		20-35		35-45		45-65		65 up	
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Total Cases		668	318	350	5	4	16	7	16	21	9	15	15	15	108	96	49	49	16	37	38	52	19	27	22	17	5	10
Total Deaths		95	58	37	4	7	3	1	2	5	...	1	...	...	3	1	2	...	...	1	4	5	13	5	14	5	13	6
Small Pox	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	Cases	345	141	204	1	2	9	5	9	17	6	10	12	11	51	70	33	39	8	20	11	24	1	6	...	...	...	...
	Deaths	3	1	2	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	...
Diphtheria	Cases	92	40	52	...	...	4	1	4	4	1	3	2	3	12	11	11	7	2	12	2	6	1	3	1	2	...	...
	Deaths	2	1	1	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
Enteric Fever (including paratyphoid)	Cases	11	6	5	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	1	1	...	2	3	1	1	...	...
	Deaths	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Pneumonia	Cases	114	75	39	4	1	3	...	1	...	...	...	1	1	6	5	4	1	4	2	18	8	12	9	18	5	4	7
	Deaths	81	54	27	4	7	3	1	1	4	...	1	...	...	3	1	1	...	...	...	4	2	11	2	14	4	13	5
Puerperal Fever	Cases	9	...	9	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	9	...	...	...	...	...	...
	Deaths	4	...	4	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	2	...	1	...	...	...	...
Cerebro Spinal Fever	Cases	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
	Deaths	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Acute Poliomyelitis	Cases	2	1	1	...	...	...	1	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Polio-encephalitis	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica	Cases	10	6	4	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1	...	3	1	1	1	...	1	...	1
	Deaths	3	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1
Dysentery	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	Cases	27	7	20	...	...	...	...	1	...	...	...	...	...	...	1	...	...	...	2	2	3	1	4	2	8	1	2
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Malaria	Cases	2	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Chicken Pox	Cases	55	40	15	...	1	...	...	1	...	1	2	...	...	37	9	1	2	...	...	...	1	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Table of Age Groups Showing Total Cases and Deaths, 1925.

Disease.		Total Cases	Total.		0-1		1-2		2-3		3-4		4-5		5-10		10-15		15-20		20-35		35-45		45-65		65 up	
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
Total Cases		160	79	81	2	1	7	1	6	6	3	4	4	6	26	18	7	13	4	7	6	14	8	5	6	3	...	3
Total Deaths		25	15	10	2	1	2	...	1	2	...	...	...	...	2	...	...	...	...	...	1	1	3	2	1	2	3	2
Small Pox	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	Cases	90	39	51	1	...	3	1	3	5	2	4	3	3	18	15	5	9	2	5	2	7	...	2	...	...	...	...
	Deaths	1	...	1	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria	Cases	25	11	14	...	...	2	...	2	1	1	...	...	2	5	3	1	3	...	1	...	3	...	...	...	...	...	1
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Enteric Fever (including paratyphoid)	Cases	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia	Cases	33	23	10	1	1	2	...	1	...	...	...	1	1	3	...	1	1	1	...	3	...	4	3	6	2	...	2
	Deaths	20	14	6	2	1	2	...	1	1	...	...	...	...	2	...	...	...	...	...	1	...	2	1	1	1	3	2
Puerperal Fever	Cases	3	...	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3	...	...	...	...	...	...
	Deaths	2	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	...	...	...
Cerebro Spinal Fever	Cases	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
	Deaths	1	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Acute Poliomyelitis	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Polio-encephalitis	Cases	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica	Cases	3	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	...	...	...	...	...
	Deaths	1	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...
Erysipelas	Cases	4	1	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1	1	...	...	1	...	...
	Deaths	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Table Showing Cases Notified in each Locality, 1925.:

Diseases.	Barnston	Bidston	Brimstage	Caldy	Childer Thornton	Eastham	Frankby	Gayton	Grange	Greasby	Great Sutton	Heswall	Hooton	Irby	Ledsham	Little Sutton	Moreton	Newton	Ness	Pensby	Prenton	Puddington	Raby	Spital (Poulton-cum-Spital)	Saughall Massie	Storeton	Thornton Hough	Thingwall	Thurstaston	Upton	Willaston	Woodchurch
Small Pox	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Scarlet Fever	...	1	...	2	4	1	4	...	1	2	4	1	1	5	1	22	13	3	...	1	2	...	2	...	...	...	1	...	...	6	1	...
Diphtheria	...	...	...	1	...	...	...	...	...	...	1	3	...	...	...	2	3	...	1	...	5	...	...	...	...	...	...	...	...	1	2	...
Enteric Fever (paratyphoid)	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pneumonia	...	1	...	1	...	1	...	...	...	2	...	2	...	1	...	...	19	...	2	...	...	...	...	...	...	...	...	...	...	1	3	...
Puerperal Fever	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1	...	...	...	...	...
Cerebro Spinal Fever	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Poliomyelitis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Acute Polio-encephalitis ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Encephalitis Lethargica ...	...	...	1	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Erysipelas	...	...	...	...	...	...	1	...	...	...	...	2	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Ophthalmia Neonatorum ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Pulmonary Tuberculosis ...	1	2	...	...	...	3	...	1	...	...	...	...	...	1	...	...	16	1	...	...	1	1	...	2	1	...	...	3	...	...	...	...
Non-pulmonary Tuberculosis	...	...	...	...	1	...	...	...	...	...	1	2	1	1	...	1	13	...	1	...	...	1	...	1	...	1	...	1	1	2	...	1
	1	5	1	4	5	6	5	1	1	4	6	13	2	8	1	25	67	4	4	1	8	2	2	4	1	1	2	4	1	10	6	1

The following cases occurred in Institutions in the District :

Wirral Institutions, 4 Scarlet Fever. Children's Hospital, Thingwall, 2 Scarlet Fever, 5 Diphtheria. Liverpool Children's Hospital, Heswall, 8 Scarlet Fever, 3 Diphtheria.

Notifiable Diseases during the year 1925.

Disease.	Total Cases Notified	Cases Admitted to Hospital	Total Deaths.
Diphtheria	25	27 (2 negative)	—
Scarlet Fever	90	76	1
Enteric Fever (including Paratyphoid)	1	1	—
Erysipelas	4	2	—
Puerperal Fever	3	2	2
Encephalitis Lethargica ...	3	2	1
Pneumonia	33	12	20
Poliomyelitis	—	—	—
Cerebro Spinal Fever ...	1	—	1
Total - -	160	122	25

Tuberculosis.

Age Periods	NEW CASES.				DEATHS.			
	Pulmonary.		Non-Pulmonary.		Pulmonary.		Non-Pulmonary.	
	M.	F.	M.	F.	M.	F.	M.	F.
Years								
0-1	—	—	1	—	—	—	1	—
5	—	—	2	8	—	—	—	3
10	—	1	3	4	—	—	—	1
15	—	—	1	1	—	—	—	—
20	—	2	1	1	—	—	—	—
25	1	4	2	—	—	2	—	—
35	5	10	—	3	3	5	—	—
45	4	4	1	—	3	3	—	—
55	1	1	—	1	1	1	—	—
65	1	—	—	—	2	—	—	—
65 and upwards ...	—	—	—	—	—	—	—	—
Totals ...	12	22	11	18	9	11	1	4

Two of the fatal cases of non-pulmonary tuberculosis were not notified ; one was notified on the day of death, and two within a month of death.

One of the pulmonary cases was not notified ; 5 were notified within a month of death ; 8 within six months ; one within 11 months ; and 5 over a year. The longest duration of any case after notification was six years.

1925.

	Cases.			Vision unimpaired	Vision impaired	Total blindness	Deaths
	Notified	Treated.					
OPHTHALMIA NEONATORUM	2	At Home. 1	In Hospital. 1	2	Nil.	Nil.	Nil.

1921-25.

	11	9	2	11	Nil	Nil	Nil

MORETON.

Nowadays it's complaisance that makes friends
and truthfulness is the mother of unpopularity.

Translation of Terence, 160 *B.C.*

MORETON demands special treatment in any health report which deals with North-west Cheshire, not only because it has championed a retrogression to medieval conditions, but also because the failure of its experiments must be obvious to all who care to think. In its present state it affords lessons to those who are inclined to defer the rigid observance of Sanitary Law to popular clamour, sentiment, and supposed expediency. Attempts to understand the conditions in the township must be based upon a knowledge of their development, and enquiry must be conducted without prejudice, with a rejection of all statements however often and vigorously repeated, for which evidence cannot be produced. There is clearly a legitimate development which complies with the requirements of the Rural District Council and is in emphatic contrast to the irregular growth which is the subject of condemnation. " Stable and gentlemanly " were the terms applied by a learned Counsel to distinguish between coherent, regulated increase, and the morbid formation called the caravan settlement. " The greater part of the township is below the level of the sea at high water "—So Mortimer wrote in 1847 ; to-day, this is still a

true statement, notwithstanding the asseverations of interested individuals who are prepared to deny the bearing which the location has upon its problems. At a meeting of the Council in October, 1925, it was stated " there were 200 houses under water at Moreton, and a boat was used to convey people to and from their dwellings." A discussion ensued on the question of whether the duty of installing a system to pump the water from the land fell upon the Council or the landowners. To spare repetition it may be asserted that previous reports on Moreton were " temperate and accurate—except in shortcoming of blame." The irrational preference for rumour, judgment based on incorrect data, and preconceived notions, in opposition to evidence, is not a phenomenon confined to the upholders of the persistence of these comfortless, dreary lairs. Years ago trouble began when an attempt was made to force the Council to pass plans for brick houses on this area, undrained, apt to be flooded, dominated by its mud gutters and the Birket. [Birket is like many of the names applied to the caravans (exception may be made for Maison de Contempt, to be found on a bungalow), a misnomer, suggesting as it does the rivulet purling through the birchen copse—however accurately it may have conformed to this description, when the old Norsemen, who named it, surveyed its waters. In their day

This land was forest, and a bright pure river
Ran through it to and from the ocean stream.
Now, through a wilderness of human forms,
And human dwellings, a polluted flood
Rolls up and down, charged with all earthly poisons,
Poisoning the air in turn.

They left us the name Carrs at Newton to tell us that it was a marsh. Again the " Mor " in Moreton is old English meaning " waste land, barren land." " It is used in place-names of swampy ground. Tun—primary meaning an enclosed piece of ground and then enclosed land with dwellings on it." This undrained land, its quagmires, morass and marsh, its overgrown ditches, slime-filled, befouled, slow oozing or com-

pletely stagnant are there for eye and nose; no amount of babbling reiteration will convert its brook to

A trotting burnie wimpling through the ground

that

Kisses with easy whirles the bord'ring grass.

Let it be noted that the brick houses could have been erected if the builder had been prepared to comply with bye-laws made for the purpose of safe-guarding the health of the inhabitants on areas of this description. The plans were rejected, but an excellent example of architectural skill in raising buildings high above the ground level and so discounting the acknowledged harm which results from building on a wet soil may be seen in the Leasowe Children's Hospital at Moreton. There were brick houses draining to cesspools — cesspools so constructed that they filled from the land drainage, while the sewage they were intended to receive poured over the land. The Medical Officer of Health of that day suggested the remedy of a sewer. The District Council referred his prescription to the Parish Council, and the latter body, by vehement protest, succeeded in the rejection of the obvious corrective, on the ground of the expense of pumping the sewage. Summer camps made their appearance in the area—for there are records of permission granted to certain individuals to erect bungalows, on the ground that "a number of other people had erected similar buildings." Wherever authorisation was obtained, a form of agreement was signed, which appears in the "form of the usual agreement" contracting to remove the building when called upon to do so by the Council. Buildings authorised and unauthorised were erected, complaints of nuisance became clamant, and the Council, after attempting fruitless reforms, called for the removal of the structures. Notice should be taken that there never was a time during which, up to this stage, the buildings could be regarded as possessing any degree of permanence, on the contrary the outlook had always been the precariousness of their tenure. Time after time there appeared prohibitions of the erection of these structures, but gradually there evolved schemes of subterfuge whereby evasion

of all Council Regulations could be acquired. Far fetched as it may seem, a great historical precedent existed for this line of action, for when London was forbidden to grow in the seventeenth century similar conditions arose. One writer records "a temporary stall or shed would imperceptibly grow into a permanent building," and in Wirral the germ of the growth has been known to originate in a hen-coop. The same writer has a paragraph which may be applied to Moreton. "It was, however, natural that houses built under the blight of a possible order that they should be rased to the ground for infringing the proclamation should be wretched places as far as possible out of sight," for can it be doubted that the flimsy structure of Moreton's paltry erections was necessitated by the need to circumvent, at the least possible expense, the order for destruction which perpetually hung over them ? The order for removal was given time and again, and time and again was rescinded on a vote, at times with a suspension of standing orders, influenced by petitions for and against, emanating from the residents in stable development, or the shopkeepers dependent on the bungalow population.

The cult of the open air was in full swing ; fill your lungs with oxygen and all disease hereditary and acquired will disappear—was the popular interpretation of the vision. Was there any wonder that the Council viewed sympathetically the aspirations of town dwellers to inhale the breezes which swept over the Leasowes, and to partake of the ozone manufactured by the ocean waves beating against the embankment ? The open air phase passed, but not before the Council were involved in the Attorney-General (on the relation of the Wirral Rural District Council) and the Wirral Rural District Council v. Kerr and Ball, etc., and other actions, which have been detailed in previous reports. A correct rendering will be found therein of what the judge actually said, and "anyone who has access to the sources of expert opinion," will have no difficulty in verifying the references. Accurate details are forgotten so that it comes about that almost without being impugned, misrepresentation such as "the Council encouraged us to build these small places, and now when the families have

grown larger they wish to destroy them," passes muster for fact. No matter how often these garbled tales may be consigned to their proper category, they re-appear as if they were cogent arguments for the toleration of an unparalleled excrescence, which, if what is claimed for it were true, would go far to be a condemnation of sanitation. Suppose the medical officer had the temerity to depict these mean, wretched habitations—bungalows truly in the original meaning of the word—" 1676 it was thought fitt to sett up bungales or hovells "—as " simple cottage dwellings under faultless sanitary regulation." Suppose he were to admit the principle that " negligent carelessnesse is more acceptable than diligent curiousnesse " and act thereon; would he not indeed be juggling with veracity, angling for popularity with bungalow owners, and would he not become the scorn of bungalow tenants and all who have eyes to see? Next in importance to carrying out the practical proposals to remedy the blemish laid bare in the investigations involved in these reports, was the criticism that they were " provocative "—if they ventilate the grievances of those who have, under the urge of necessity, to dwell in the colony, if they stimulate the hitherto limited range of vision of bungalow owners and if they awaken those who are prepared to dose until " the deluge of growing civilisation sweeps away such relics "—then the provocation has not been without results. Before the bungalow nuisance had become so rampant—spreading its noxious influence like a contagion from Moreton, necessitating precise and full explanation of its mischievous nature, the public took as much interest in the Annual Reports as they take in the reports of gas companies in which they own no shares. On the other hand the interest now extends far beyond those who have to lament the invasion in their own neighbourhoods, beyond those who delight in the possible flouting of a Local Authority, reaching even serious students of sociology, and it may be neighbouring authorities, land hungered, who see opportunities for aggrandisement in the results of our domestic difficulties. Perhaps the pungent, uncompromising criticism, which the medical officer had to employ to direct attention to this jumble of bivouacs, in his attempts to expose the folly and

futility of the representation that prosperity and comfort were its characteristics, emanated from the distortions induced by a jaundiced eye. Therefore, the restrained, unprejudiced report of the medical officer to the neighbouring Borough of Wallasey made in January, 1925, becomes important. The report is a letter to the Minister of Health and appears here subject to a condition that the following addition is made.— " The visit was made on January 19th. There had not been any rain for some two weeks prior to the visit, so the place was seen under conditions most favourable to it. You may not perhaps agree with me but in my view it is a great pity that the Wallasey Bill for the taking in of Moreton was not proceeded with, if only for the reason that, with the superior Parliamentary Powers which Wallasey possesses for dealing with such grossly insanitary conditions as prevail in Bungalow Town, both in their Private Acts and by virtue of their being a County Borough, they would be enabled to deal with this question more efficiently and expeditiously than you can with your limited powers and that without material cost to either district."

The insertion of this proviso does not imply agreement therewith either in its statements or in its conclusions.

CONDITIONS AT MORETON.

I have not had the opportunity of making a detailed examination of the conditions existing in Bungalow Town, Moreton, but I have seen sufficient to give the Minister of Health an idea of the conditions existing there. Let me say at once, and without the slightest exaggeration, that as regards sanitation, or rather the lack of it, with respect to the bungalows in Moreton, the clock must be put back sixty years to find conditions comparable to it. If the vital statistics of Moreton are as favourable as reported, Moreton stands as a unique example of the value of light and air in the preservation of health ; for if we exclude the influence of light and outside air, in my view the worst slum in any large town in all other respects compares very favourably with a large number of the caravans in Moreton ; and if there is the urgent necessity (as no doubt there is) to clear away all slums, there is an equal necessity to clear away the majority of the caravans. There is, moreover,

another problem in Moreton, and it is this. All over the Township there are being erected an inferior type of permanent or semi-permanent houses which will, in a very few years, become slums, and so far as I can see, no roads, except existing roads, are being made.

One hardly knows how to begin a description of the prevailing conditions in Bungalow Town. There are several large fields, some densely packed with bungalows, others with some sort of order in the arrangement of the bungalows and not so densely packed, and some others with bungalows dotted here and there over them. All have some features in common :—

(*a*) No provision for the disposal of slop water, which is thrown anywhere, polluting the ground around the bungalow and the ditches in the vicinity.

(*b*) Water is supplied by standpipes, far too few in number, placed in various spots among the bungalows. Some of the latter must be 150 yards from the nearest standpipe.

(*c*) Pail-closets, quite inadequate in number, very primitive and unsuitable, placed in wooden erections for the most part out of repair. The urinal accommodation, too, is quite inadequate, and drains without hindrance into adjoining ditches.

One bungalow I by chance picked upon and examined was a ramshackle wooden erection about 17ft. by 8ft. over all, containing one living and two bedrooms, the bedrooms just big enough to hold one single bed each, and inhabited, as I was told, by a man, his wife and eight children, among them two girls 14 and 12 years of age. The bungalow was on filthy sodden ground, and some six yards away in the front was a ditch filled with green filthy ooze. Between the ditch and the house was a roadway on which the contents of the ashbins had been tipped to make it passable, and at the back there was a series of dilapidated wooden erections, one of which I was told contained a pail-closet, cheek by jowl with a run with a few hens. The water supply was about 80 yards away. In one series of fifty bungalows, described to me as the best managed of the lot—and certainly the bungalows were apparently in better condition than the average—for the accommodation of these fifty bungalows, which were placed in two large fields and one small field, there were seven water taps and two enclosures containing five pail-closets for females, four pail-closets and

one urinal each for men. Each of the urinals drains directly into ditches. Immediately at the rear of some of the bungalows was a sheet of foul stagnant water 15 yards square, and on another portion set behind there is a pit about the same dimensions in the process of being filled up with decaying rubbish of all sorts, and innumerable tins and bottles. The worst field of all almost beggars description. It contains some 150 bungalows in all stages of disrepair, bounded on one side by a foul smelling stream perhaps two feet deep, on another by a ditch of about the same depth filled with stagnant water, almost pure sewage, and on the other side by another ditch of stagnant water ; all absolutely unprotected and crossed by planks in two places. The main places between the bungalows, called by courtesy paths, were simply churned up mud with planks here and there to cross the most perilous parts. Some of the bungalows were actually standing in pools of foul water, while the water had disappeared below others leaving a filthy mud behind. In two spots were placed in the midst of a mass of bungalows the closet accommodation provided for their use. This consisted of whitewashed dilapidated enclosures, made of rusty, decayed galvanized iron and wood. In one part of the enclosure, with a concrete floor containing many holes, were placed side by side four pail-closets about 2 feet 6 high, and, therefore, totally unsuitable for children ; and immediately behind and within the same curtilage compounds, where were deposited large dumps of putrefying matter of all kinds, including human excreta. How such a state of affairs is allowed to exist in this twentieth century is beyond comprehension, and unless one has actually seen, one can hardly believe it possible.

This report is accurate, comparable conditions could have been found sixty years ago, but " unless one has actually seen, one can hardly believe it possible " is a comparatively mild denunciation, for the actual state is indescribable and attempted descriptions must leave much to the imagination for the chaotic ugliness is unimaginable. There must have been something in a scheme which was able to cast a glamour over so many people, if the contention is sound that they lived in the colony from choice. It may have been its originality, its freedom from the bondage of town or village convention, or the advertisement of its health-giving qualities, or its comparative freedom from the terrors of rating, which appealed to different groups. The claim of land and bungalow owners to have

performed a service for the public weal by supplying habitations for the workers when the Council failed in this respect may be dismissed with the remark that those philanthropists make an exorbitant demand upon our credulity

and thus they wold, if we will beleve
wypen our nose with our owne sleve.

or "that they were moved, as all men are under such circumstances, by nine parts of self-interest, gilt over with one part of philanthropy." More detailed examination of certain propositions which have been most assiduously broadcast must be made before they can be proved to be at variance with the reality and summarily dismissed.

Size and Construction of Bungalows.—It is asserted that these "miserable, patchwork, dwellings," composed of "a rickle o' auld rotten deals nailed thegither and warped wi' the wind" are comfortable, commodious and convenient for the rearing of families. Some idea of airspace may be arrived at from the wording of the model regulation for cows kept in cowsheds.—"A cow-keeper shall not cause or allow any cowshed in his occupation to be occupied by a larger number of cows than will leave not less than 800 feet of air space for each cow." Contrast this regulation with the space for children, women and men in "the huts of Adam's posterity built sluttishly along" the Birket, shown in this analysis of the air space in 53 bungalows. The measurements were taken as the result usually of the occurrence of illness or of some condition which drew particular attention to the building, but in no case was a selection made with a view to emphasising the worst of their type.

GROUP I.—Six bungalows had each less than 1,000 cubic feet of air space. There was a population of 24.

	Air Space. Cubic Feet.		Floor Space. Square Feet.		Occupants.	
a.	828	...	138	...	2 adults	2 children
b.	735	...	105	...	2 ,,	2 ,,
c.	970	...	162	...	2 ,,	4 ,,
d.	728	...	112	...	1 adult	0 ,,
e.	840	...	120	...	4 persons	
f.	448	...	74	...	2 adults	3 ,,

GROUP II.—20 bungalows had each from 1,000—1,500 cubic feet of air space. There was a population of 102.

	Air Space. Cubic Feet.		Floor Space. Square Feet.		Occupants.	
a.	1408	...	176	...	2 adults	2 children
b.	1344	...	192	...	2 ,,	2 ,,
c.	1330	...	195	...	2 ,,	3 ,,
d.	1428	...	204	...	5 ,,	3 ,,
e.	1408	...	176	...	2 ,,	3 ,,
f.	1323	...	189	...	6 persons	
g.	1323	...	193	...	2 adults	0 ,,
h.	1127	...	161	...	2 ,,	
i.	1134	...	126	...	5 persons	
j.	1232	...	176	...	4 ,,	
k.	1344	...	168	...	5 ,,	
l.	1232	...	176	...	4 ,	
m.	1344	...	178	...	5 ,,	
n.	1230	...	177	...	5 ,,	
o.	1488	...	228	...	5 ,,	
p.	1061	...	193	...	8 ,,	
q.	1440	...	180	...	5 ,,	
r.	1380	...	184	...	6 ,,	
s.	1152	...	144	...	7 ,,	
t.	1302	...	217	...	7 ,,	

GROUP III.—23 bungalows had each from 1,500—2,000 cubic feet of air space. Population 107.

	Air Space. Cubic Feet.		Floor Space. Square Feet.		Occupants.
a.	1512	...	216	...	4 persons
b.	1820	...	260	...	7 ,,
c.	1540	...	226	...	9 ,,
d.	1764	...	212	...	5 ,,
e.	1656	...	207	...	5 ,,
f.	1568	...	224	...	3 ,,
g.	1638	...	234	...	6 ,,
h.	1532	...	196	...	3 ,,
i.	1952	...	256	...	7 ,,
j.	1565	...	234	...	4 ,,
k.	1820	...	218	...	7 ,,
l.	1798	...	278	...	4 ,,
m.	1504	...	188	...	4 ,,
n.	1939	...	277	...	2 ,,
o.	1935	...	186	...	5 ,,
p.	1670	...	220	...	9 ,,

	Air Space, Cubic Feet.		Floor Space, Square Feet.		Occupants.
q.	1872	...	270	...	2 persons
r.	1564	...	196	...	1 person
s.	1792	...	245	...	4 persons
t.	1656	...	224	...	2 ,,
u.	1880	...	235	...	4 ,,
v.	1638	...	234	...	5 ,,
w.	1610	...	230	...	5 ,,

GROUP IV.—Four bungalows had each from 2,000—2,700 cubic feet. Population 24.

Air Space. Cubic Feet.		Floor Space. Square Feet.		Occupants.
2240	...	280	...	5 persons
2196	...	306	...	8 ,,
2700	...	300	...	6 ,,
2112	...	264	...	5 ,,

These 53 bungalows had a population of 257 persons, and it should not be forgotten that most of them contained furnishings which filled a large amount of space and added to the complexity of the problem of how the residents dispose themselves within them. The measurements have all been taken as if no bulkheads or partitions sub-divided the bungalows, and in every case where additions existed their space has been added. It may be at once admitted that they are not commodious nor are they convenient, nor do the residents agree with the sentiments of the writer of

Don't talk ov housen all o' brick,
Wi' rocken walls nine inches thick,
A-trigg'd together zide by zide
In streets, wi' fronts a straddle wide,
Wi' yards a-sprinkled wi' a mop
Too little vor a vrog to hop.

A peasant's cottage, erected in the 13th century, afforded greater floor space than any one of the bungalows in this summary. "A competent dwelling for her to inhabit containing 30 feet in length within the walls and fourteen feet in breadth with corner posts and three new and competent doors and two windows."

Population.—The increase of Moreton is accounted for in the 1921 Census Volume in the following terms—" the increase of population in this parish is attributed mainly to the erection of bungalows, caravans, tents, etc., by persons unable to obtain house accommodation in the neighbouring towns." When the census was taken, in all probability it was correct to attribute Moreton's growth mainly to the bungalow population, but since 1921, brick-built houses have increased, and the census statement is no longer applicable.

At the 1921 Census, the Populations of Moreton and Heswall were as follows :—

	Total.	Males.	Females.	Persons.
Moreton ...	4,029	1,979	2,050	2.9 per acre
Heswall ...	4,349	1,894	2,455	3.3

1.37 rooms were available in Heswall for each person and 0.87 for each person in Moreton. There were in Moreton 738 private families with a population of 3,039 in 709 structurally separate dwellings.

The Registrar-General supplied, by request, the following details for Moreton :—

	Males.	Females.	Persons.
North of Wirral Railway ...	986	924	1,910
South of Wirral Railway ...	849	902	1,751

The number of persons living in caravans, tents, bungalows, etc., and included in the above :—

	Males.	Females.	Persons.
North of Wirral Railway ...	653	767	1,420
South of Wirral Railway ...	234	255	489

From the Surveyor's Department it was ascertained at midsummer, 1925, that 1,026 houses existed in the Parish of Moreton, and if the number of occupants per house remained as at the census, then 4,104 would represent the house population. The bungalow population is an unknown and varying quantity, but assuming that it has not increased since the census, and there is some evidence that it has decreased, then the total population might be estimated at 6,013. In any

event, the estimate of 28,000, which has appeared in the press is erroneous.

From the same source, information was obtained that Heswall had 977 houses and 113 bungalows. With a similar type of assumptions, Heswall would now have a population of 4,469 persons in private families. An attempt to base claims to the comparative healthiness or unhealthiness of Moreton and Heswall on figures derived from these assumptions is futile. All that is plain from the development is that in neither parish will the population bear the same ratio to the total population of the Rural District as it did at the 1921 census.

Differences undoubtedly exist in the amenities of individual caravans and bungalows, but when the whole principle on which a settlement is based is wrong, an attempt to differentiate in a report of this kind is not required.

Much more subtle propositions appear in the popular assertions concerning the healthiness of Moreton Bungalow Colony. Arguments deduced from examples of persons who have lived in the colony and not been ill ; invalids with chronic rheumatism who have received benefit from residence on the water-logged sites ; and chronic bronchitics and consumptives who have ceased to cough, cannot have much weight attached to them. The force of suggestion is strong and the existence of the examples quoted need not even be discredited for "Lo one hath seen and all the blind will see." The assumption that an insanitary mélange produces a health resort is one which requires (using Carlyle's phrase) to be modestly but peremptorily and irrevocably denied. Doctors may have recommended Moreton for the complaints mentioned, but the recommendations amount to nothing more than support for the statement " there are many schisms in medicine, as well as in religion, and each sect can quote the fathers in support of the tenets they profess."

Infectious Diseases.—Even where ocean breezes blow, the seeds of illness are sown by insanitary conditions, but it would be too much to expect that the crop would germinate, grow,

ripen and be reaped in a solitary season. Moreover, there is no question that, although no definite statistics are available, the bungalow population is of a migratory character. This appeared markedly in the investigation directed to the determination of the number of the occupants in certain bungalows. There can be no data available to prove the lowering of vitality consequent upon an experiment of the bungalow type, for lowered vitality and lessened working capacity do not necessarily imply disease.

Tuberculosis.—The incidence of Tuberculosis may render some sort of a clue to health conditions for it is associated in its causation with faulty housing, improper feeding, and general contravention of health laws. Apparently, a somewhat dulled apprehension of these facts is entertained by bungalow advocates for it is still common to hear " there is no Tuberculosis in Moreton." How far this agrees with the official record may be seen from the following figures for 1925.

The figures include the whole township, but exclude all Leasowe Hospital cases :—

New cases of Tuberculosis notified in 1925 :—

Pulmonary.		Other.		
M.	F.	M.	F.	Total.
5	11	4	9	29

Twenty-nine cases were notified in 1925, but it is a fair assumption that there would be other sufferers who did not need to seek medical aid. Ten of the pulmonary cases were known to have Tubercle Bacilli in their expectoration at the time of notification. In compliance with a demand to compare Moreton and Heswall figures (a comparison which obviously would not be suggested by a Medical Officer) the Heswall figures are given for the same period.

New cases of Tuberculosis notified in 1925 :—

Pulmonary.		Other.		
M.	F.	M.	F.	Total.
0	0	1	1	2

An examination of the records, from 1921—25, inclusive, shows that 76 cases were notified in Moreton and 23 in Heswall.

	Pulmonary.		Other.		
	M.	F.	M.	F.	Total.
Moreton ...	23	22	13	18	76
Heswall ...	9	9	3	2	23

The No Tuberculosis in Moreton myth might reasonably be considered to be dissipated by the figures quoted, so far as the thinking section of the community is concerned.

Infectious Diseases (*other than Tuberculosis*).—Stoutly is the thesis maintained that Moreton has a smaller incidence of infectious disease than the more behoused townships. An enquiry into this proposition after elimination of cases in the Children's Hospitals reveals the shallowness of its foundation. The figures in 1925 were :—

	Moreton.	Heswall.
Pneumonia	19	2
Scarlet Fever	13	1
Diphtheria	3	3
Typhoid	1 (proved negative)	1
Erysipelas	1	2
Ophthalmia Neonatorum	2	0

The statistics are given because they were asked for and not because there is intention to lay undue stress upon their significance, but the following quotation on Tuberculosis and Pneumonia, from a recent medical paper is not without its relationship to them " we believe the pneumococcus and the tubercle bacillus can supply a most forcible argument for better housing conditions, and that when we have the evidence in a form in which it can be presented, we shall be able to say that these deadly enemies of mankind exert their evil influence in inverse ratio to the decency wherewith the people are housed."

Minor non-notifiable infectious diseases, measles, whooping cough, mumps and impetigo, all prevented children from attending school during 1925.

Deaths.—The death-rate has been invoked in aid by champions of Moreton. " Arcadia keeps no statistics," she trusts to memory, so when statistics are produced Arcadians are apt to be startled. Here is a township which the sanitary officers malign, but it has a low death-rate, so it is absurd to common sense that a low death-rate and insanitary conditions can exist side by side, so their adverse criticisms may be disregarded or be treated as calumnies. The following extract, from Udny Yule on The Function of Statistical Method in Scientific Investigation, is an authoritative statement of the position.— " The proportion of deaths to population in a district is affected not only by its sanitary condition—however broadly we interpret that term—but by all kinds of other circumstances ; not only by such definite circumstances as the ages of the population (if there are many of the old this will tend to throw up the number of deaths) and the proportion of the sexes (age for age, the mortality amongst women is usually less than amongst men), but also by that medley of circumstance which differentiates any chance sample of individuals from any other." Medical officers and others accustomed to deal with statistics would not stress the number of deaths which appear in the strained comparison between Moreton and Heswall, which is forced upon the writer, but it is impossible to comprehend what data in favour of the perpetuation of Moreton conditions can be deduced from the number of deaths—

Moreton 64 Heswall 36.

The figures are too small, the data are inadequate, and inferences will be inaccurate. There are certain conclusions which find general acceptance as for example " the maximum effect of bad environment in depressing health is between the ages of two and three years ": " under 5 years of age, females are more affected by unhealthy surroundings than males, though from 5 years and upwards the converse phenomenon is observed."

Deaths under 1 year of age :—

Moreton 10 Heswall 2.

Deaths from 1 to 15 years :—

Moreton 11 Heswall 5.

Deaths from 15 to 45 years :—
Moreton 18 Heswall 5.

Deaths over 45 years :—
Moreton 27 Heswall 22

Births.—In 1925, Moreton 158 Heswall 56.

The total number of births in Moreton in the five years, 1921—25, was 474 of which 5% were illegitimate ; in Heswall in the same period the births numbered 312 and 2.2% were illegitimate.

School data.—If conditions exist, such as warrant the criticisms directed towards their removal, some indication of their deleterious effects ought to be found among the children at school age. A recognition of this fact has led superficial observers to assert that nowhere else can such healthy children be found as in Moreton. The school medical inspector does not share this view, for subjoined is a report of an inspection made last summer at a school at which over 90% of the children were from the Moreton area.

I saw 73 children and found the following :—

16 Children advised re removal of tonsils and adenoids, *i.e.*, suffering from markedly enlarged tonsils and nasal obstruction.
10 Suffering from defective vision.
1 partially blind.
4 suffering from anæmia and debility.
2 from degree of malnutrition.
1 with cleft palate.
1 with palate deformity.
1 with Spina bifida.
1 with leg deformity (injury).
1 with Blepharitis.
1 with T.B. hip and T.B. glands (neck).
3 with T.B. neck glands (2 cicatrices : 1 without).
1 Mentally dull : (others, but not seen at this exam.)
1 ? morally defective.
1 umbilical hernia.
1 asthma and bronchitis.
14 were noted as having marked dental caries.

Examination re cleanliness :—
found 3 fleabitten.
4 with nits.
3 with head lice.
1 with body lice.

Altogether 33 children were found to be physically defective—apart from the 11 verminous ones.

Mothers attended well : 47 were seen.

Poor Law.—" Many of the inhabitants depend for their existence on Poor Law Relief, the dole, and casual labour." This was a statement made in last year's Annual Report ; misquoted repeatedly, detached from its context and " many of" altered to " all," it was made to appear that the Medical Officer asserted that the drawing of the dole and relief was the main occupation of the inhabitants. There was no infliction of wrong in the statement, and it is true, that many of them have " a mortgage on the public purse."

Persons in receipt of Poor Law Relief (out-door) during 1925 :—

	Men.	Women.	Children.	Total.
Moreton ...	80	94	281	455
Heswall ...	0	9	10	19

Patients admitted to Clatterbridge Infirmary from :—

	Men.	Women.	Children.	Total.
Moreton ...	18	31	53	102
Heswall ...	6	9	1	16

29 Moreton children under 5 years of age were admitted to the children's ward and 15 of them were reported to be verminous.

Total number :—Moreton 557 Heswall 35.

The Remedy.—Without the suggestion of a remedy the foregoing part of this report on Moreton would be " a mere thrashing of dusty straw," and it is unfortunate that all this detail which is matter of fact can be demanded by the vested interest which determines the continuance of the colony. A writer has stated that " the chief physician of the sanitary

system is the district engineer," and the engineer has produced his plans for sewering the area. It cannot possibly be an economic proposition to connect these habitations with a sewer, even if this were desirable from the standpoint of sanitation. In the past the argument has been adduced that there could be no dispossession of the tenants as they would be homeless if the Moreton caravans did not harbour them. An examination of this thesis in the light of information produced by the Assistant Surveyor, who has shared the Herculean task of the Sanitary Inspector in the attempt to control the colony, showed that a considerable proportion of the bungalows were unoccupied—706 unoccupied, 1,395 occupied. Many of the 706 unoccupied bungalows must fall into the category of additional homes for persons who are provided with houses in other localities. They are said to be let at 30/- to £2 per week in the summer months. There should be a rigid enforcement of the law whereby the implied contract between landlord and tenant that the dwelling is in all respects reasonably fit for habitation is maintained. Absence of any other dwelling might be a justifiable excuse for living under Moreton conditions, but free choice to revert to primitive conditions should be prohibited. Every bungalow should have its floor space measured up and should have a ticket affixed showing how many persons may be allowed to occupy it. Owners who sub-let their bungalows might agree to a provision of this character, or the Ministry, in the present stage of the colony, might grant special powers to the Council to prevent a recrudescence of overcrowding when a bungalow becomes vacant.

Model clauses of this type could be enforced.

> (1). If the medical officer has reason to believe that any dwelling-house or separate tenement in the district comprising any number of living rooms and bedrooms not being more than four in all is used for the accommodation of more persons than having regard to the health and well-being of the occupants should be accommodated therein, the medical officer or inspector of nuisances may at any time between the hours of nine o'clock in the morning and nine o'clock in the evening enter such dwelling-house or tenement and may measure in cubic feet the space

(exclusive of lobbies, closets and presses, and of recesses not exceeding four feet in depth, and not having a separate window therein, and not perfectly clear from floor to ceiling and from wall to wall, and exclusive also of recesses in which there is any fixture whatever) contained in each such room, and if the cubic contents of any such room do not exceed one thousand cubic feet may affix in some prominent position within the dwelling-house or tenement a plate or a ticket on which shall be marked the number of such cubic feet and the number of persons exceeding the age of eight years who, without a breach of the provisions of subsection (2) of this section, may sleep in each room, and any person who obliterates, defaces, removes, or alters such marking or ticket, shall be liable to a penalty not exceeding ten shillings. Provided that if entry to any such dwelling-house under the provisions of this section is refused by the person having the custody of such dwelling-house, or any person acting on his behalf any Justice may upon the application of the Council or the medical officer or inspector of nuisances grant a warrant to the medical officer or inspector of nuisances to enter such dwelling-house during the hours aforesaid for the purposes of this section and any person who obstructs the medical officer or inspector of nuisances in the performance of his duty under such warrant, and this section shall be liable to a penalty not exceeding five pounds.

(2). If any room in any such dwelling-house or tenement is used for the purposes of sleeping in by a greater number of persons than in proportion of one person of the age of eight years or upwards for every four hundred cubic feet of space, or of one person of any age less than eight years for every two hundred cubic feet of space ascertained to be contained therein by measurement as hereinbefore provided or by a greater number of persons than is marked on the plate or ticket affixed therein in pursuance of subsection (1) of this section, every person being an occupier of such dwelling-house, and so using it or suffering it to be used shall be liable to a penalty not exceeding twenty shillings for every day or part of a day during which it is used or suffered to be used, and the medical officer or inspector of nuisances may, from time to time, enter such dwelling-house if he have reason to believe that the provisions of this section are being contravened.

The radical cure of Moreton is not to be found in any measure which merely alleviates and does not eradicate the disease. Gradual substitution of brick-built cottages on

a satisfactory site is the true remedy, but this must be undertaken to replace bungalow structures. Building figures, submitted for houses built in Moreton without reference to the bungalows which they replace, are valueless so far as the problem is concerned, for as pointed out previously, there is a legitimate development which has no relationship to the colony.

Summary of attempts to control the Colony 1925 :—

Number of Informal Notices.	Number complied with.	Number of Statutory Notices.	Statutory Notices complied with.	Proceedings Taken	Proceedings Pending
80	34	45	41	11	4

A copy of this report should be sent to the "good natured press and the better natured public."

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